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10-30-09 (Date) Pamela L. Rein (Name)

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application of :

Applicant	:	McKibben, et. al.
Serial No.	:	10/731,906
Filed On	:	12/10/2003
Title	:	CONTEXT INSTANTIATED APPLICATION PROTOCOL
Docket No.	:	LET01-GN005
Examiner	:	Lie, Angela M.
Art Unit	:	2163

Commissioner for Patents
Alexandria, VA 22313

DECLARATION OF PRIOR INVENTION UNDER 37 CFR § 1.131

I, Michael T. McKibben, as an authorized representative of Leader Technologies, Inc., the assignee of record for the instant patent application, declare the following:

1. The joint inventors of the subject matter described in the pending claims (numbered as claims 1 through 12 and claims 16 through 43) of the above-identified patent application are Michael T. McKibben and Jeffrey R. Lamb (hereinafter "inventors").

2. Prior to June 15, 1999, the inventors conceived of the invention as described and claimed in the above-identified patent application in this country. Further, from prior to June 15, 1999 through at least November 8, 2001, the inventors diligently developed and reduced to practice the invention as described and claimed in the above-identified patent application in this country. Such conception, diligence and reduction to practice may be evidenced by the following:

(a) *Exhibit A* is a document, created on or before January 19, 1999, representing a communications platform having features including at least a Leader Network, a Leader Web Portal, an index, metatags, Leaderboards, channels, Leadership servers, Leader database, entry, sessions, navigation guide, browse/search/find, administration, user types, user settings, privacy, security, product staging and/or product architecture.

(b) *Exhibit B* is a document, created on or before May 18, 1999, describing in detail a communications software platform ("Leader project"). This document includes a software description, a description of project goals (including milestone dates for various goals), a description of technology and business overviews, and a description of specifications and/or functions. Among others, at least the following aspects are discussed in detail: webs, boards, user-generated data, metadata, scalability, ubiquity, channels, profiles, users, applications, contexts and data store. This is version 1.0 of this Leader project document.

(c) *Exhibit C* comprises two slides, created on or before August 8, 1999, from a Leader software platform presentation. These slides showcase differences between the Leader software platform and then-current technology. These slides specifically discuss a user-generated aspect, no datatype limits aspect and a social structure emphasis of the platform.

(d) *Exhibit D* is a document, created on or before August 26, 1999, describing in detail a communications software platform ("Leader project"). This document includes a software description, a description of project goals (including milestone dates for various goals), a description of technology and business overviews, and a description of specifications and/or functions. Among others, at least the following aspects are discussed in detail: webs, boards, user-generated data, metadata, scalability, ubiquity, channels, profiles, users, applications, contexts and data store. This is version 2.0 of the Leader project document shown in *Exhibit B*.

(e) *Exhibit E* is a document, created on or before October 4, 1999, describing various aspects of the communications software platform. This document includes a description of functions being developed for a demonstration of the communications software platform. Specifically, this document relates to web-based email client, file format converter, search engine indexer, database and web search engine of index database. Specifically, this document describes the structure and functionality of an index database and searching the index database based on metadata.

(f) *Exhibit F* is a document, created on or before November 5, 1999, describing various functionality of Leaderboards. Among other functions, this document describes the automatic context function related to the Leaderboards. At page 7, this document states,

> "A person will also be able to create a totally new message from a Leaderboard/Topic. This will allow the "system" to communication with another person or Leaderboard and provide a valuble shared resource. Only people who have create authority on a Leaderboard will be able to reply to messages or create new messages. This process of having the system communicate is central to the Leaderboard system. It is the central core of the automatic context functionality. Having a message come from a Leaderboard, automatically creates the connections for the information in the message. Any responses to that message would be automatically placed in the correct Leaderboard/Topic inbox and would then also be automatically put in context."

(g) *Exhibit G* comprises a table, created on or before January 5, 2000, showing an example Leaderboard database structure including tables, fields, descriptions thereof, types, sizes and purposes.

(h) *Exhibit H* is a document, created on or before January 20, 2000 through April 13, 2000, describing various aspects of the communications software platform. This document includes a software description and a description of specifications and/or functions. Among others, at least the following aspects are discussed in detail: webs, boards, user-generated data, metadata, scalability, ubiquity, channels, profiles, users, applications, contexts and data store. This is version 2.2 of the Leader project document of *Exhibits B and D*.

(i) *Exhibit I* comprises a table, created on or before May 10, 2000, showing features developed and implemented in the Leader platform software.

(j) *Exhibit J* comprises one slide, created on or before June 2, 2000, from a Leader software platform presentation. This slide is similar to that shown in *Exhibit C*.

(k) *Exhibit K* comprises three email messages (dated December 19, 20 and 21, 2000) discussing progress made in design, generation of code, general software development and implementation of several aspects of the Leader communications software platform.

(l) *Exhibit L* is a screenshot of a development source code hierarchy tree originally created on or before December 18, 2000.

The screenshot shows a list of files in a left column and the contents of a text file (index.txt) that describes the contents and purpose of the remaining development source code hierarchy in a right column.

(m) *Exhibit M* comprises a table, created on or before February 14, 2001, showing features developed and implemented in various versions of the Leader platform software.

(n) *Exhibit N* comprises the contents of three files identified in *Exhibit L*. Specifically, these files include HighLevel.jpg, LeaderDataModel.jpg and Framework.jpg. These three files are shown as they existed on or before February 20, 2001. These files generally show the development of processing flows, organizations and/or structures of the Leader communications software platform.

(o) *Exhibit O* is a document, created on or before November 6, 2001. This document relates to source code development of the Leader communications software platform. Among other features, this document discusses metadata related to authors of documents/files.

(p) *Exhibit P* is a screenshot of the Leader project source code overview as it existed on or before November 8, 2001. This overview depicts the general structure and contents of the source code of the Leader communications software platform.

(q) *Exhibit Q* comprises expense, payroll and/or salary records showing that approximately 15 employees were employed between 1999 and 2001. A primary function of these employees was to develop software for the Leader project, including the subject matter of the claimed invention. These records show various employee salaries, expenses and payroll items for Leader Technologies and Computer Wizards (a subsidiary of Leader Technologies) for the 1999, 2000 and 2001 time periods.

3. At least *Exhibit P* comprises evidence that the Leader communications software platform was in existence on or before November 8, 2001. As shown by the above factual evidence comprising the *Exhibits* and assertions, it is clear that embodiments were created and/or steps were performed constituting an actual reduction to practice of the claimed invention as recited in claims 1 through 12 and claims 16 through 43 of the above-identified patent application on or before November 8, 2001.

4. As an example of such conception prior to the critical date of June 15, 1999, each of the limitations of claim 1 reads on the content of

Exhibits A and *B*. The following explanation provides objective factual evidence that the subject matter of claim 1 was conceived prior to June 15, 1999.

(a) In general, *Exhibits A* and *B* show conception of the element "*a system that facilitates the association of data with a user, a first context and a second context*." Specifically, as shown in *Exhibit A*, for example, the "Leader Network" is a collection of Intranet and Internet Web Portals consisting of four major market spaces: 1) Public Internet users 2) Fortune 1000 companies 3) Customers of Fortune 1000 companies 4) Free-agents and consultants that serve the Fortune 1000. As depicted at item 21 of *Exhibit A*, the Leader Network includes that is ubiquitous, and supports all four markets by providing a generalized Web communications platform that gives users the ability to open targeted channels of communications across these marketplaces. As depicted at item 20 of *Exhibit A*, the webs may be connected together in the Leader Network, and data, communications and information may be seamlessly updated and accessed. As depicted at item 22 of *Exhibit A*, for example, index topics may be related to Leaderboards, channels and/or users. Each of these may be deemed a context. As depicted at item 23 of *Exhibit A*, metatags (including user defined meta tags, Leader compliant tags and/or Leader third party VAR tags) may be used to add context to topical index descriptions. These tags may allow a user to create meta-indexes over existing indexes and/or overlay different indexing systems that are purchased or shared with some external source.

(b) *Exhibits A* and *B* also show conception of the limitation, "*a storage device adapted to store data and contextual metadata, the contextual metadata being associated with: a) the user; b) a data component that is associated with one or more data operations being performed on the data; and c) a tagging component that automatically tags contextual information as the contextual metadata when the data is created, the contextual information being at least one of automatically generated information generated by the system upon creation of the data and automatically generated information generated by the system upon the one or more data operations being performed on the data*." Specifically, as shown in *Exhibit A*, for example, at least items 4 and 5 described databases that may store data and contextual information related Leaderboards and Channels. As previously stated, item 23 of *Exhibit A* provides metatags associated with the Leaderboards and/or Channels that may be may be used to add context.

(c) *Exhibits A* and *B* also show conception of the limitation, "*a computer device linked via one or more communication links to the*

storage device, the computer device adapted to execute a software tool." Specifically, *Exhibit A* describes that users may communicate with the Leader Network (including the storage devices associated therewith) using a web portal, intranet, Internet, a LeaderOnline server, a luminary server and/or a corporations server.

(d) *Exhibits A* and *B* also show conception of the limitation, "*automatically tagging contextual information related to the user, the software tool, and the first context to the data as contextual metadata upon one or more data operations being performed on the data while in the first context to which the software tool is associated*" and "*updating the contextual metadata based upon the one or more data operations.*" The "user tracking" aspect of item 7 of *Exhibit A* indicates that users (and their locations and/or actions) may be tracked based on the context. Further, the "About Me" aspect of item 8 of *Exhibit A* shows that other users may view aspects of the user including how the others users see the user and availability of the user. If a user is viewing a first channel, for example, other users may be able to see that using the Leader Network.

(e) *Exhibits A* and *B* also show conception of the limitation, "*automatically tagging contextual information related to the user, the software tool, and the second context to the data as contextual metadata upon one or more data operations being performed on the data while in the first context to which the software tool is associated*" and "*updating the contextual metadata based upon the one or more data operations.*" The "user tracking" aspect of item 7 of *Exhibit A* indicates that users (and their locations and/or actions) may be tracked based on the context. Further, the "About Me" aspect of item 8 of *Exhibit A* shows that other users may view aspects of the user including how the others users see the user and availability of the user. If a user is viewing a second channel, for example, other users may be able to see that using the Leader Network.

5. As an example of such diligence between prior to June 15, 1999 through an actual reduction to practice on or before November 8, 2001, each of the limitations of claim 1 reads on the content of *Exhibits C* through *O*. Such diligence consisted of consistent and constant development of the claimed invention on at least a week-to-week basis. Additionally, *Exhibit Q* shows that a significant amount of resources (including time and money) was allocated during the 1999 through 2001 time period to diligently develop the subject matter of the claimed invention. Further, the following explanation provides objective factual evidence that the subject matter of claim 1 was diligently developed between prior to June

15, 1999 through an actual reduction to practice on or before November 8, 2001.

(a) In general, *Exhibits C* through *O* show diligence of the element "*a system that facilitates the association of data with a user, a first context and a second context.*" Specifically, as shown in *Exhibit D*, for example, the "Leader Desktop" is the look and feel of the interface of the user, which provides a way to interact with components of the Leaderboards. *Exhibit D* (at page 9-10) also describes that the system is able to relate information with users. For example, "just by using an e-mail message, that message would be associated with you (the person who touched it), the person it came from... ." Additionally, *Exhibit F*, for example, depicts associations of users with discussion boards, messages, calendars and meetings, among other contexts. Further, *Exhibit M*, for example, depicts various contexts with which users may be associated.

(b) *Exhibits C* through *O* also show diligence of the limitation, "*a storage device adapted to store data and contextual metadata, the contextual metadata being associated with: a) the user; b) a data component that is associated with one or more data operations being performed on the data; and c) a tagging component that automatically tags contextual information as the contextual metadata when the data is created, the contextual information being at least one of automatically generated information generated by the system upon creation of the data and automatically generated information generated by the system upon the one or more data operations being performed on the data.*" Specifically, as shown in *Exhibit D*, for example, a database file is provided that stores data and contextual metadata. An example of this storage occurs at pages 9-10, stating, "the expectation for the one-touch system is to be able to relate different pieces of information together, in the database file, just by using it in the system." This information may be associated with users. Page 9 of *Exhibit D* further states, "the database structure will support multiple different kinds of relationships." For example, "just by using an e-mail message, that message would be associated with you (the person who touched it), the person it came from... ." Additionally, *Exhibit D* describes that when files are uploaded to the system, "the database will be updated with the file name, the description of the file, the size of the file, the date the file was loaded, the relationship to the person who uploaded the file, the board the file was updated on." Additionally, *Exhibit F*, for example, depicts associations of users with discussion boards, messages, calendars and meetings, among other contexts. Further, *Exhibit M*, for example, depicts various contexts with which users may be associated.

(c) *Exhibits C* through *O* also show diligence of the limitation, "*a computer device linked via one or more communication links to the storage device, the computer device adapted to execute a software tool.*" Specifically, as shown in *Exhibit D*, for example, the "Leader Desktop" is the look and feel of the interface of the user, which provides a way to interact with components of the Leaderboards. Also, *Exhibit E*, for example, shows that a web-based email client, database, search engine indexer and web search engine were developed for use by users. Further, *Exhibit D*, for example, includes a large amount of screenshots showing a software tool communicating with a storage device of the Leader communications platform. *Exhibit H* includes many descriptions (including on at least page of the a software tool in communication with a storage device via an intranet and/or the Internet. Further, *Exhibit M*, for example, depicts various functions, contexts and/or interfaces of the software tool with which users may interact.

(d) *Exhibits C* through *O* also show diligence of the limitation, "*automatically tagging contextual information related to the user, the software tool, and the first context to the data as contextual metadata upon one or more data operations being performed on the data while in the first context to which the software tool is associated*" and "*updating the contextual metadata based upon the one or more data operations.*" Specifically, *Exhibit D* (pages 9-10) describes an example automatic creation of contextual information. Specifically, the description on pages 9-10 states,

> "The expectation for the one-touch system is to be able to relate different pieces of information together, in the database file, just by using it in the system. In other words, just by using an e-mail message, that message would be associated with you (the person who touched it), the person it came from, it would be associated with the subject, or a new subject (Topic) could be created. The intent is to automatically have information related to each other as it makes sense based on the way it is used in the system. The database structure will support multiple different kinds of relationships, which will allow for this functionality. What we are doing is 'helping" the users of the system by creating the links for the data and not making them do it.
>
> We recognize that the more we ask the user to do, the more we will be at risk of the system not delivering what we would like it to. So we need to figure out ways to get information and topics together automatically. Getting people and information should be easy. Any time anyone touches some information they are associated with it. But getting the topics and the information together will be a little trickier. What we have to do is have topics opened on a LEADER Board and then allow information to be associated with it. In other words in a LEADER Board on Product Development there would be multiple products listed. Each one of them could be a topic, and if there was a word document created about one of the products it would be uploaded to the board and made available for everyone. This way, the person does not have to put a

categorization on the file (nor have to agree with the categorizations of the group), but rather just upload the file to the board and it will be related to the topic it is loaded to and the person who loaded it.

In all cases, any possible relationships which can be made by a user accessing a file, needs to be made."

Additionally, *Exhibit D* (on page 2) describes that when files are uploaded to the system, "the database will be updated with the file name, the description of the file, the size of the file, the date the file was loaded, the relationship to the person who uploaded the file, the board the file was updated on." Additionally, *Exhibit E* (on page 4) shows that an index database may include metadata that relates to an author, for example, of a file, document and the like. *Exhibit F*, for example, depicts contextual metadata that relates users with discussion boards, messages, calendars and meetings, among other contexts. *Exhibit G* shows various contextual information as it may exist in a database of the Leaderboards. *Exhibit H* provides descriptions similar to that of *Exhibit D*. *Exhibits I* and *M*, identify various functions that may utilize and/or relate to contextual metadata. Further, *Exhibit N* includes LeaderDataModel.jpg, which depicts relationships between users, data and contexts. *Exhibit N* also includes Framework.jpg, which depicts a ContentUserCollection item that associates, stores and/or updates contextual metadata based upon the operations being performed on the content (data) by users. *Exhibit O* (on page 1 of 9) describes that (in the context of a new "versioning" function) contextual metadata is to be automatically generated for each version of a file. *Exhibit O* (on page 7 of 9) describes that (in the context of a new "versioning" function) contextual metadata including author of a file is to be stored for each version of a file.

(e) *Exhibits C* through *O* also show diligence of the limitation, "*automatically tagging contextual information related to the user, the software tool, and the second context to the data as contextual metadata upon one or more data operations being performed on the data while in the first context to which the software tool is associated*" and "*updating the contextual metadata based upon the one or more data operations.*" Specifically, *Exhibit D* (pages 9-10) describes an example automatic creation of contextual information. Specifically, the description on pages 9-10 states,

"The expectation for the one-touch system is to be able to relate different pieces of information together, in the database file, just by using it in the system. In other words, just by using an e-mail message, that message would be associated with you (the person who touched it), the person it came from, it would be associated with the subject, or a new subject (Topic) could be created. The intent is to automatically have information related to each other as it makes sense based on the way it is used in the system. The database structure will support multiple different kinds of relationships, which will allow for this functionality. What we are doing

> is 'helping" the users of the system by creating the links for the data and not making them do it.
>
> We recognize that the more we ask the user to do, the more we will be at risk of the system not delivering what we would like it to. So we need to figure out ways to get information and topics together automatically. Getting people and information should be easy. Any time anyone touches some information they are associated with it. But getting the topics and the information together will be a little trickier. What we have to do is have topics opened on a LEADER Board and then allow information to be associated with it. In other words in a LEADER Board on Product Development there would be multiple products listed. Each one of them could be a topic, and if there was a word document created about one of the products it would be uploaded to the board and made available for everyone. This way, the person does not have to put a categorization on the file (nor have to agree with the categorizations of the group), but rather just upload the file to the board and it will be related to the topic it is loaded to and the person who loaded it.
>
> In all cases, any possible relationships which can be made by a user accessing a file, needs to be made."

Additionally, *Exhibit D* (on page 2) describes that when files are uploaded to the system, "the database will be updated with the file name, the description of the file, the size of the file, the date the file was loaded, the relationship to the person who uploaded the file, the board the file was updated on." Additionally, *Exhibit E* (on page 4) shows that an index database may include metadata that relates to an author, for example, of a file, document and the like. *Exhibit F*, for example, depicts contextual metadata that relates users with discussion boards, messages, calendars and meetings, among other contexts. *Exhibit G* shows various contextual information as it may exist in a database of the Leaderboards. *Exhibit H* provides descriptions similar to that of *Exhibit D*. *Exhibits I* and *M*, identify various functions that may utilize and/or relate to contextual metadata. Further, *Exhibit N* includes LeaderDataModel.jpg, which depicts relationships between users, data and contexts. *Exhibit N* also includes Framework.jpg, which depicts a ContentUserCollection item that associates, stores and/or updates contextual metadata based upon the operations being performed on the content (data) by users. *Exhibit O* (on page 1 of 9) describes that (in the context of a new "versioning" function) contextual metadata is to be automatically generated for each version of a file. *Exhibit O* (on page 7 of 9) describes that (in the context of a new "versioning" function) contextual metadata including author of a file is to be stored for each version of a file.

6. As an example of such reduction to practice on or before November 8, 2001, each of the limitations of claim 1 reads on the content of *Exhibits M* through *P*. The following explanation provides objective factual evidence that the subject matter of claim 1 was reduced to practice on or before November 8, 2001.

(a) In general, *Exhibits M* through *P* show reduction to practice of the element "*a system that facilitates the association of data with a user, a first context and a second context.*" *Exhibit M*, for example, shows the functions and/or contexts developed and reduced to practice (as of February 14, 2001) in a beta version, a version 1, a version 1.5, a version 2 of the communications platform. Note that there are very few functions that were scheduled for "future" (or post-February 4, 2001) development. Specific functions reduced to practice in the beta version and version 1 include, for example, Acknowledge Content, Creating Leaderboards, Discussions, E-mail, Messages, Notes, Online Meetings, Shared Files, Tasks and Webs, all of which associate a user with data. *Exhibit N* (on the Framework.jpg page) states that 500 Java classes for an exemplary feature (including the ContentUserCollection item that associates, stores and/or updates contextual metadata based upon the operations being performed on the content (data) by users) of the application were coded. *Exhibit P* shows that an overview of the source code of the communications platform, as reduced to practice on or before November 8, 2001.

(b) *Exhibits M* through *P* also show reduction to practice of the limitation, "*a storage device adapted to store data and contextual metadata, the contextual metadata being associated with: a) the user; b) a data component that is associated with one or more data operations being performed on the data; and c) a tagging component that automatically tags contextual information as the contextual metadata when the data is created, the contextual information being at least one of automatically generated information generated by the system upon creation of the data and automatically generated information generated by the system upon the one or more data operations being performed on the data.*" *Exhibit M*, for example, shows the functions and/or contexts developed and reduced to practice (as of February 14, 2001) in a beta version, a version 1, a version 1.5, a version 2 of the communications platform. Note that there are very few functions that were scheduled for "future" (or post-February 4, 2001) development. Specific functions reduced to practice in the beta version and version 1 include, for example, Acknowledge Content, Creating Leaderboards, Discussions, E-mail, Messages, Notes, Online Meetings, Shared Files, Tasks and Webs, all of which associate a user with data. *Exhibit N* (on the Framework.jpg page) states that 500 Java classes for an exemplary feature (including the ContentUserCollection item that associates, stores and/or updates contextual metadata based upon the operations being performed on the content (data) by users) of the application were coded. *Exhibit P* shows that an overview of the source code of the

communications platform, as reduced to practice on or before November 8, 2001.

(c) *Exhibits M* through *P* also show reduction to practice of the limitation, "*a computer device linked via one or more communication links to the storage device, the computer device adapted to execute a software tool.*" *Exhibit M*, for example, shows the functions and/or contexts developed and reduced to practice (as of February 14, 2001) in a beta version, a version 1, a version 1.5, a version 2 of the communications platform. Note that there are very few functions that were scheduled for "future" (or post-February 4, 2001) development. *Exhibit N* (on the HighLevel.jpg and LeaderDataModel.jpg pages) shows that customers (users) communicate with boards, applications and/or files stored by the communication platform. *Exhibit P* shows that an overview of the source code of the communications platform, as reduced to practice on or before November 8, 2001.

(d) *Exhibits M* through *P* also show reduction to practice of the limitation, "*automatically tagging contextual information related to the user, the software tool, and the first context to the data as contextual metadata upon one or more data operations being performed on the data while in the first context to which the software tool is associated*" and "*updating the contextual metadata based upon the one or more data operations.*" *Exhibit M*, for example, shows the functions and/or contexts developed and reduced to practice (as of February 14, 2001) in a beta version, a version 1, a version 1.5, a version 2 of the communications platform. Note that there are very few functions that were scheduled for "future" (or post-February 4, 2001) development. Specific functions reduced to practice in the beta version and version 1 include, for example, Acknowledge Content, Creating Leaderboards, Discussions, E-mail, Messages, Notes, Online Meetings, Shared Files, Tasks and Webs, all of which associate a user with data using contextual information. *Exhibit N* (on the Framework.jpg page) states that 500 Java classes for an exemplary feature (including the ContentUserCollection item that associates, stores and/or updates contextual metadata based upon the operations being performed on the content (data) by users) of the application were coded. *Exhibit P* shows that an overview of the source code of the communications platform, as reduced to practice on or before November 8, 2001.

(e) *Exhibits M* through *P* also show reduction to practice of the limitation, "*automatically tagging contextual information related to the user, the software tool, and the second context to the data as contextual metadata upon one or more data operations being*

performed on the data while in the first context to which the software tool is associated" and "*updating the contextual metadata based upon the one or more data operations.*" *Exhibit M*, for example, shows the functions and/or contexts developed and reduced to practice (as of February 14, 2001) in a beta version, a version 1, a version 1.5, a version 2 of the communications platform. Note that there are very few functions that were scheduled for "future" (or post-February 4, 2001) development. Specific functions reduced to practice in the beta version and version 1 include, for example, Acknowledge Content, Creating Leaderboards, Discussions, E-mail, Messages, Notes, Online Meetings, Shared Files, Tasks and Webs, all of which associate a user with data using contextual information. *Exhibit N* (on the Framework.jpg page) states that 500 Java classes for an exemplary feature (including the ContentUserCollection item that associates, stores and/or updates contextual metadata based upon the operations being performed on the content (data) by users) of the application were coded. *Exhibit P* shows that an overview of the source code of the communications platform, as reduced to practice on or before November 8, 2001.

7. As evidenced by *Exhibit Q*, a significant amount of resources (including thousands of work-hours, over a million dollars and much effort) was expended in the conception, diligent development and reduction to practice of the claimed invention. Approximately 15 employees were employed at various times in the 1999 through 2001 time period, as shown in *Exhibit Q*.

8. Conception, diligence and reduction to practice of the invention as described in the above-identified patent application occurred in the United States.

9. It should be noted that *Exhibits A* through Q are merely a small portion of documentation evidencing conception, diligence and reduction to practice of the invention. Hundreds of pages of evidence documenting such conception, diligence and reduction to practice exist. Should the Examiner desire additional evidence, we would be happy to produce it upon request.

SIGNATURE

As a person signing below:

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like are punishable by fine or imprisonment, or both (18 U.S.C. § 1001) and may jeopardize the validity of the application or any patent issuing thereon.

Assignee: Leader Technologies, Inc.
Authorized Representative: Michael T. McKibben, Chairman & Founder

Assignee's Signature Michael T. McKibben
Date Oct 30 2009
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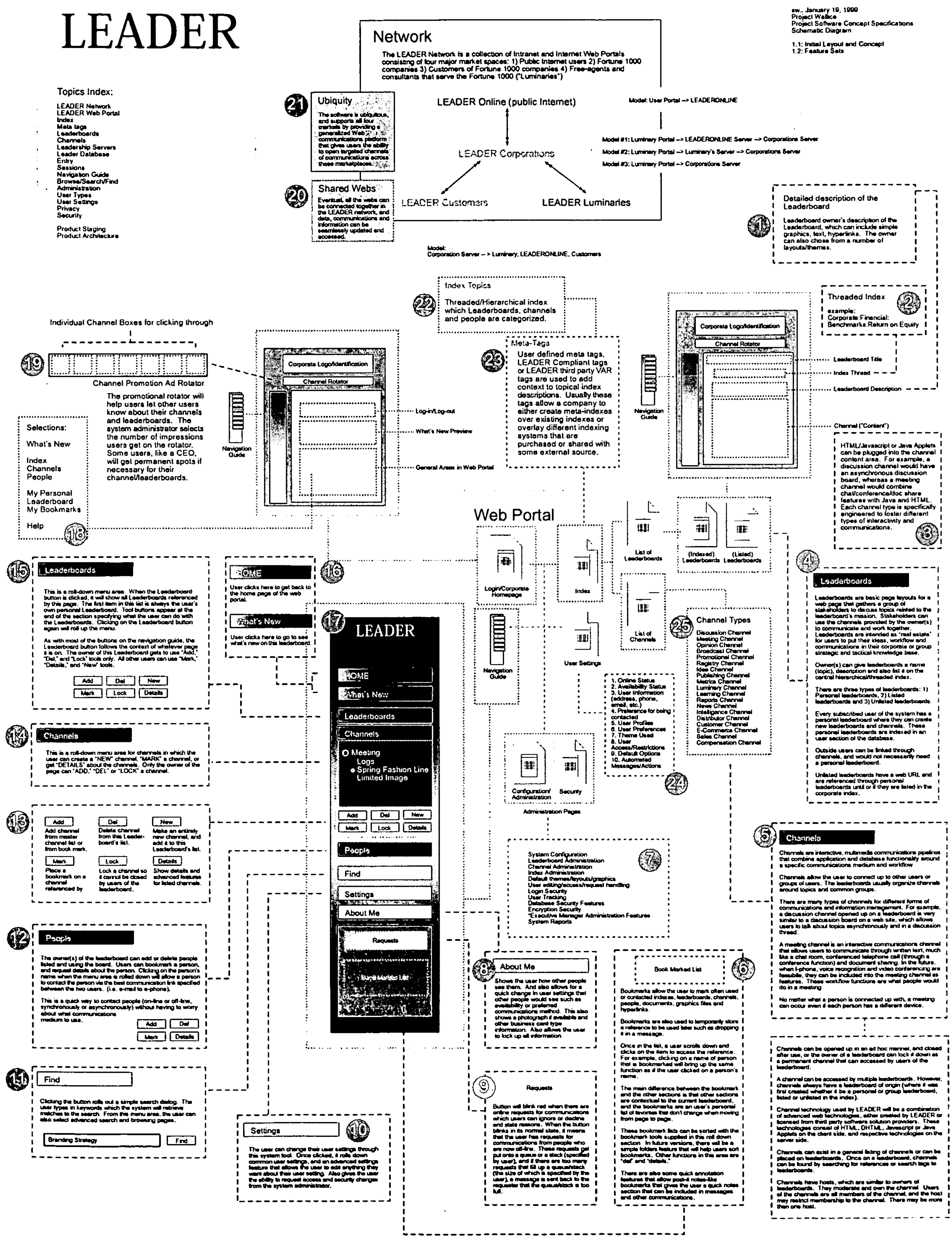
<u>EXHIBIT A</u>

created on or before January 19, 1999



LEADER
sw., January 19, 1999
Project Wallace
Project Software Concept Specifications
Schematic Diagram
1.1: Initial Layout and Concept
1.2: Feature Sets
Topics Index:
LEADER Network
LEADER Web Portal
Index
Meta tags
Leaderboards
Channels
Leadership Servers
Leader Database
Entry
Sessions
Navigation Guide
Browse/Search/Find
Administration
User Types
User Settings
Privacy
Security
Product Staging
Product Architecture
Network
The LEADER Network is a collection of Intranet and Internet Web Portals consisting of four major market spaces: 1) Public Internet users 2) Fortune 1000 companies 3) Customers of Fortune 1000 companies 4) Free-agents and consultants that serve the Fortune 1000 ("Luminaries")
LEADER Online (public Internet)
LEADER Corporations
LEADER Customers
LEADER Luminaries
Model: User Portal --> LEADERONLINE
Model #1: Luminary Portal --> LEADERONLINE Server --> Corporations Server
Model #2: Luminary Portal --> Luminary's Server --> Corporations Server
Model #3: Luminary Portal --> Corporations Server
Model:
Corporation Server --> Luminary, LEADERONLINE, Customers
21
Ubiquity
The software is ubiquitous, and supports all four markets by providing a generalized Web communications platform that gives users the ability to open targeted channels of communications across these marketplaces.
20
Shared Webs
Eventual, all the webs can be connected together in the LEADER network, and data, communications and information can be seamlessly updated and accessed.
1
Detailed description of the Leaderboard
Leaderboard owner's description of the Leaderboard, which can include simple graphics, text, hyperlinks. The owner can also chose from a number of layouts/themes.
22
Index Topics
Threaded/Hierarchical index which Leaderboards, channels and people are categorized.
2
Threaded Index
example:
Corporate:Financial:
Benchmarks:Return on Equity
23
Meta-Tags
User defined meta tags, LEADER Compliant tags or LEADER third party VAR tags are used to add context to topical index descriptions. Usually these tags allow a company to either create meta-indexes over existing indexes or overlay different indexing systems that are purchased or shared with some external source.
Individual Channel Boxes for clicking through
19
Channel Promotion Ad Rotator
The promotional rotator will help users let other users know about their channels and leaderboards. The system administrator selects the number of impressions users get on the rotator. Some users, like a CEO, will get permanent spots if necessary for their channel/leaderboards.
Corporate Logo/Identification
Channel Rotator
Navigation Guide
Log-in/Log-out
What's New Preview
General Areas in Web Portal
Leaderboard Title
Index Thread
Leaderboard Description
Channel ("Content")
3
HTML/Javascript or Java Applets can be plugged into the channel content area. For example, a discussion channel would have an asynchronous discussion board, whereas a meeting channel would combine chat/conference/doc share features with Java and HTML. Each channel type is specifically engineered to foster different types of interactivity and communications.
18
Selections:
What's New
Index
Channels
People
My Personal Leaderboard
My Bookmarks
Help
Web Portal
Login/Corporate Homepage
Index
List of Leaderboards
(Indexed) Leaderboards
(Listed) Leaderboards
List of Channels
Navigation Guide
User Settings
Configuration/ Administration
Security
Administration Pages
25
Channel Types
Discussion Channel
Meeting Channel
Opinion Channel
Broadcast Channel
Promotional Channel
Registry Channel
Idea Channel
Publishing Channel
Metrics Channel
Luminary Channel
Learning Channel
Reports Channel
News Channel
Intelligence Channel
Distributor Channel
Customer Channel
E-Commerce Channel
Sales Channel
Compensation Channel
24
1. Online Status
2. Availability Status
3. User Information (address, phone, email, etc.)
4. Preference for being contacted
5. User Profiles
6. User Preferences
7. Theme Used
8. User Access/Restrictions
9. Default Options
10. Automated Messages/Actions
4
Leaderboards
Leaderboards are basic page layouts for a web page that gathers a group of stakeholders to discuss topics related to the leaderboard's mission. Stakeholders can use the channels provided by the owner(s) to communicate and work together. Leaderboards are intended as "real estate" for users to put their ideas, workflow and communications in their corporate or group strategic and tactical knowledge base.
Owner(s) can give leaderboards a name (topic), description and also list it on the central hierarchical/threaded index.
There are three types of leaderboards: 1) Personal leaderboards, 2) Listed leaderboards and 3) Unlisted leaderboards.
Every subscribed user of the system has a personal leaderboard where they can create new leaderboards and channels. These personal leaderboards are indexed in an user section of the database.
Outside users can be linked through channels, and would not necessarily need a personal leaderboard.
Unlisted leaderboards have a web URL and are referenced through personal leaderboards until or if they are listed in the corporate index.
15
Leaderboards
This is a roll-down menu area. When the Leaderboard button is clicked, it will show all Leaderboards referenced by this page. The first item in this list is always the user's own personal Leaderboard. Tool buttons appear at the end of the section specifying what the user can do with the Leaderboards. Clicking on the Leaderboard button again will roll up the menu.
As with most of the buttons on the navigation guide, the Leaderboard button follows the context of whatever page it is on. The owner of this Leaderboard gets to use "Add," "Del," and "Lock" tools only. All other users can use "Mark," "Details," and "New" tools.
Add
Del
New
Mark
Lock
Details
16
HOME
User clicks here to get back to the home page of the web portal.
What's New
User clicks here to go to see what's new on this leaderboard.
17
LEADER
HOME
What's New
Leaderboards
Channels
Meeting
Logs
Spring Fashion Line
Limited Image
Add
Del
New
Mark
Lock
Details
People
Find
Settings
About Me
Requests
14
Channels
This is a roll-down menu area for channels in which the user can create a "NEW" channel, "MARK" a channel, or get "DETAILS" about the channels. Only the owner of the page can "ADD," "DEL" or "LOCK" a channel.
13
Add
Add channel from master channel list or from book mark.
Del
Delete channel from this Leaderboard's list.
New
Make an entirely new channel, and add it to this Leaderboard's list.
Mark
Place a bookmark on a channel referenced by
Lock
Lock a channel so it cannot be closed by users of the leaderboard.
Details
Show details and advanced features for listed channels.
12
People
The owner(s) of the leaderboard can add or delete people listed and using the board. Users can bookmark a person, and request details about the person. Clicking on the person's name when the menu area is rolled down will allow a person to contact the person via the best communication link specified between the two users. (i.e. e-mail to e-phone).
This is a quick way to contact people (on-line or off-line, synchronously or asynchronously) without having to worry about what communications medium to use.
Add
Del
Mark
Details
11
Find
Clicking the button rolls out a simple search dialog. The user types in keywords which the system will retrieve matches to the search. From this menu area, the user can also select advanced search and browsing pages.
Branding Strategy
Find
10
Settings
The user can change their user settings through this system tool. Once clicked, it rolls down common user settings, and an advanced settings feature that allows the user to edit anything they want about their user setting. Also gives the user the ability to request access and security changes from the system administrator.
7
System Configuration
Leaderboard Administration
Channel Administration
Index Administration
Default themes/layouts/graphics
User editing/access/request handling
Login Security
User Tracking
Database Security Features
Encryption Security
*Executive Manager Administration Features
System Reports
8
About Me
Shows the user how other people see them. And also allows for a quick change in user settings that other people would see such as availability or preferred communications method. This also shows a photograph if available and other business card type information. Also allows the user to lock up all information.
9
Requests
Button will blink red when there are online requests for communications which users can ignore or decline and state reasons. When the button blinks in its normal state, it means that the user has requests for communications from people who are now off-line. These requests get put onto a queue or a stack (specified by user), and if there are too many requests that fill up a queue/stack (the size of which is specified by the user), a message is sent back to the requester that the queue/stack is too full.
6
Book Marked List
Bookmarks allow the user to mark often used or contacted indexes, leaderboards, channels, people, documents, graphics files and hyperlinks.
Bookmarks are also used to temporarily store a reference to be used later such as dropping it in a message.
Once in the list, a user scrolls down and clicks on the item to access the reference. For example, clicking on a name of person that is bookmarked will bring up the same function as if the user clicked on a person's name.
The main difference between the bookmark and the other sections is that other sections are contextual to the current leaderboard, and the bookmarks are an user's personal list of favorites that don't change when moving from page to page.
These bookmark lists can be sorted with the bookmark tools supplied in this roll down section. In future versions, there will be a simple folders feature that will help users sort bookmarks. Other functions in this area are "del" and "details."
There are also some quick annotation features that allow post-it notes-like bookmarks that gives the user a quick notes section that can be included in messages and other communications.
5
Channels
Channels are interactive, multimedia communications pipelines that combine application and database functionality around a specific communications medium and workflow
Channels allow the user to connect up to other users or groups of users. The leaderboards usually organize channels around topics and common groups.
There are many types of channels for different forms of communications and information management. For example, a discussion channel opened up on a leaderboard is very similar to a discussion board on a web site, which allows users to talk about topics asynchronously and in a discussion thread.
A meeting channel is an interactive communications channel that allows users to communicate through written text, much like a chat room, conferenced telephone call (through a conference function) and document sharing. In the future, when I-phone, voice recognition and video conferencing are feasible, they can be included into the meeting channel as features. These workflow functions are what people would do in a meeting.
No matter what a person is connected up with, a meeting can occur even if each person has a different device.
Channels can be opened up in an ad hoc manner, and closed after use, or the owner of a leaderboard can lock it down as a permanent channel that can accessed by users of the leaderboard.
A channel can be accessed by multiple leaderboards. However, channels always have a leaderboard of origin (where it was first created whether it be a personal or group leaderboard, listed or unlisted in the index).
Channel technology used by LEADER will be a combination of advanced web technologies, either created by LEADER or licensed from third party software solution providers. These technologies consist of HTML, DHTML, Javascript or Java Applets on the client side, and respective technologies on the server side.
Channels can exist in a general listing of channels or can be placed on leaderboards. Once on a leaderboard, channels can be found by searching for references or search tags to leaderboards.
Channels have hosts, which are similar to owners of leaderboards. They moderate and own the channel. Users of the channels are all members of the channel, and the host may restrict membership to the channel. There may be more than one host.

EXHIBIT B

created on or before May 18, 1999

LEADER Meeting™ (Draft)

1. Software Description:

LEADER Meeting™ will be an easy-to-use Web application designed to be hassle free, quick to learn and requires only basic Web browsing skills. With LEADER Meeting™, users will be able to setup meetings with web and telephony technologies integrated into a virtual online meeting environment. LEADER Meeting™ is a full-featured collaboration application that runs on a Java™ enabled web server and accessed through a standard web browser.

LEADER Meeting™ provides easy-to-use tools to efficiently organize collaboration services for groups of users. Among the features are the ability to setup conference calls, display presentation materials and documents using an online projector, setup a collaborative workspace, send files/e-mail/faxes/messages to other meeting participants, communicate in collaborative multi-lingual online chats, take meeting notes/summaries and manage meetings.

LEADER Meeting™ is intended to be one of many web applications offered in the LEADER Office application suite. Users who log into a LEADER Web™ will usually find LEADER Office™ bundled with any LEADER Web. In the future, users of LEADER Meeting™ and LEADER Office™ will be able to access, use and link to services and applications on the LEADER Network™ at LEADER.com to be released in year 2000.

2. Project Goal:

The goal of this software prospectus is to define the product design, software features, project scope, user workflow and general implementation issues related to building a full-featured collaboration application. In other words, it is a design and product blueprint.

From this software prospectus, LEADER software engineers will design and implement an application tier and database that will deliver the specified services and products to a thin Web browser client. The engineering specifications and working documents should be developed from the information contained in this document. Included in the engineering document are also quality assurance plans, versioning plans and change order guidelines.

During the engineering process, error handling and deployment specifications will be developed. A help index system for the software and on-line tutorial will also be developed concurrently with the software engineering process.

The engineering team will also submit development resource requirements and a project schedule for completing LEADER Meeting™ prior to the commencement of software development. This project is intended to be a fast-track development project. The engineering team must coordinate and meet the action milestones listed below. LEADER Meeting™ will be the responsibility of the LEADER Office™ Application Team. The LEADER Office™ Application project team will work closely with the LEADER Web™ project and the LEADER Network™ project teams.

Action Milestones for LEADER Meeting™	Due Date
Software Engineering Specifications	May 20
All Software Project Plans	June 1
Complete Acquisition of Project Resources	June 15
Software Architecture	June 15
Alpha Product ("Feature Complete")	September 1
Beta Product ("All known bugs, pre-release")	November 1
Beta Test /w Qwest and beta users	November 1 – November 15
Golden Master ("GM")	December 1
Product deployment	January 1, 2000

3. Technology and Business Overview:

The age of distributed network computing has finally arrived, and the mainstream computer user no longer needs to worry about software or hardware infrastructure. Through a thin client browser and across the Internet, mainstream business and consumer users will be able to tap into a large and complete network of services and infrastructure unattainable in the past. Many network technologies are converging, and LEADER is at the "cross-roads" of the new Network Computer revolution.

All applications built on the LEADER Network™ and the Application Network Infrastructure will be built around a complete business model that will allow LEADER to reach all targeted marketplace segments in the new distributed network computing paradigm. With a clear understanding of users, marketplaces, purchasers, market tiers and the future of network computing, LEADER will be able to build complete, whole product solutions. For a complete discussion of business concepts, please refer to the LEADER Business Plan (second edition).

Marketplace:

There are three market tiers of end-users and purchasers for the LEADER Network™ and LEADER applications:

1) Enterprise-level software, which requires scalable, and potentially transactional capabilities.
2) Business tier software, which includes mid sized and independent consulting agents.
3) Online users that encompasses small businesses and mainstream consumers.

LEADER'S marketplace goal is to reach out to each market segment with both its integrated LEADER Applications and Software suites and also the LEADER Network™. This includes targeting a wide variety of VARs, and third-party software and web-site developers. The LEADER Network™ will support a complete environment for developing, deploying and using fully integrated web applications. LEADER will use industry standard frameworks and software models to provide mobile code with resource and network location transparency. With LEADER'S Application Network, the mainstream user will finally be able to connect up to the complete network computer platform by the year 2002.

The "Complete" distributed computing network is described in figure 1. LEADER will be developing the Application Network, an integral layer and segment of the Network computing infrastructure. The Application Network is where users will access the computer software interface and application workflow that is driven by telecommunications and component technologies that deliver software and hardware computing transparently to the user via the Internet. LEADER'S unique human interface design allows target users and business and consumer suppliers to leverage specific workflow web applications and network technology services over a seamless and open software and network architecture.

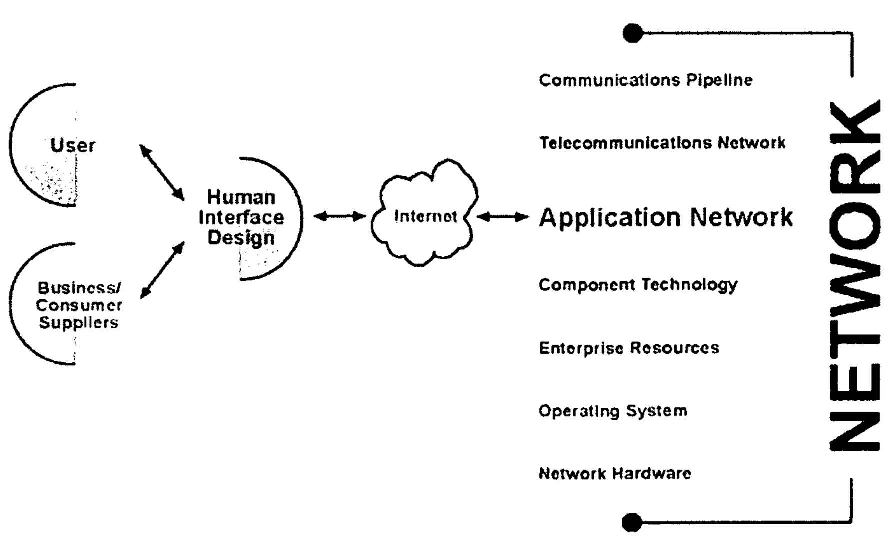


Figure 1

The three network marketplaces LEADER is most concerned with are:

1) the TelApp market, which integrates telecommunications with web applications/networks
2) the ComApp market, which integrates component technologies with web applications/networks
3) the BizApp market, which targets business and consumer suppliers and their web software and sites to the LEADER application network.

The LEADER Network™ organizes these marketplaces and their technologies together. These three network marketplaces are the foundations for the targeted and transparent end-user experience of the Network computer world. LEADER Meeting™ and other LEADER collaboration software tools will help LEADER meet the needs of the TelApp market.

LEADER Network™ Architecture:

The LEADER Network™ consists of an Internet network of Hubs, Webs and Channels. Hubs are collections of inter-related LEADER Webs deployed over the Internet. Hubs are central gateways to collections of webs. LEADER.com will be central network location to launch into Hubs supported by LEADER. Webs are collections of data, web applications, channels and web pages. The distributed web applications on LEADER Webs™ deliver data to the end-user via dynamically created user interfaces. Communications between LEADER Webs™, Applications and users occurs in LEADER Channels™, which are workflow and multimedia rich interactive web places that are shippable and linkable anywhere a simple URL or web link can be embedded. LEADER applications are able to manage a large variety and range of workflow and knowledge management activities through user centric channel communications tools and environments.

LEADER Meeting™ is a distributed web application capable of creating a meeting channel across the entire LEADER Network™ and over the Internet (see figure 2; diagram A).

LEADER NETWORK

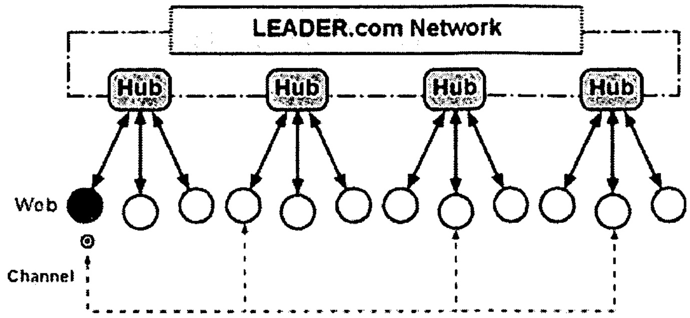


Diagram A

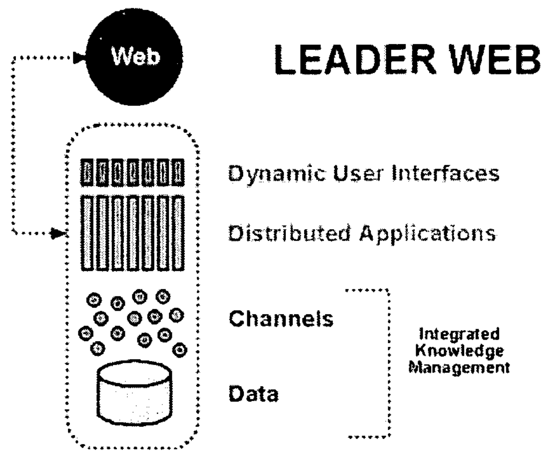


Diagram B

Figure 2

Versions:

LEADER Meeting™ will have three versions, each with slight variations of workflow depending on the target customer and user. These versions will be similar to other LEADER applications versions. LEADER'S goal is to develop multiple versions of the same product and product line for different marketplaces so that the optimal technology and business models may be achieved for each marketplace.

The first version of LEADER Meeting™ that will be developed by LEADER is the "Telco Version." The Telco Version will be targeted at Telephony services providers to give for free to end users of the LEADER Meeting™ software. Telcos will charge usage fees for collaboration features such as call conferencing initiated through LEADER Meeting™. LEADER Meeting™ will be co-branded with both LEADER and supporting Telco logos. Payment method for the Telco version will be a user account link to the Telco database. The user list and the LEADER Meeting™ application will reside at the Telco's database and web servers. Access control of the LEADER Meeting™ application itself will be handled by the software, and its own database that will also reside at the Telco web servers. LEADER will receive commissions from usage fees from the Telco.

In the LEADER.com Network Version, the telephony service provider will be LEADER. LEADER will provide services from a select Telco under a service agreement contract. LEADER will manage the LEADER.com web and services and handle user account and management at LEADER.com. Payment will be by credit card by the end user. LEADER will mark-up the telephony services and will negotiate lower mass-volume rates for telephony services.

In the LEADER Enterprise or Business versions, the purchaser of the LEADER web software will be able to administer and select from multiple telephony service providers marketed through the LEADER Network™. Payment will be by an account that will be opened with a select Telco by the enterprise. User lists and access controls will be handled by the company using the LEADER web software. LEADER will receive commissions from Telcos for companies using their services through the LEADER Web Software.

Specific version implementation will be designed during the engineering process and specifications development. All versions will be whole product, commercial-of-the-shelf type solutions.

3. Specifications:

3.1. Requirements for LEADER Meeting™:

Server Side: Java compatible web server capable of running Java Beans (Java Servlets)

Client Side: Internet Explorer 3.0.2+ or Netscape Navigator 3.0+

Java Version: JDK 1.15, JSDK

API(s): JavaBeans, Java Database Connectivity (JDBC), Java Shared Data Toolkit (JSDT), Java Telephony Application Programming Interface (JTAPI), JavaMail Extension,

Supporting Products: Qwest Telephony API (and various standard telephony APIs), PointPlus (Web enabled PowerPoint™ Viewer), 1 Cool Button (Java Applet Button toolkit).

Translation Software Components to be acquired.

Supporting LEADER Applications and Services: LEADER Web™

Browser Compatibilities:

LEADER Meeting™ will require users to have Internet Explorer 3.0.2+ or Netscape Navigator 3.0+. Some select features in LEADER Meeting™ will require 4.0 or greater versions in each respective browser. When a user lacks the correct version, help pages will be created to inform the user of where to download the newer components/software and an associated link.

LEADER Meeting™ Components:

Most LEADER software applications for the Web will use a combination of business objects and application services written in Java, and will implement either Java Beans or Enterprise Java Beans depending on the need of the customer. The entire application network platform utilizes Java Bean and Enterprise Java Beans technology throughout the application tier described in figure 3. By using Enterprise Java Beans, LEADER'S software application layer will be able to operate and take advantage of enterprise scalable resources through OTM's and other Enterprise middleware.

The application network will provide complete application, web, hub and other network services unparalleled on the marketplace today. LEADER application developers, third-party software developers and independent web sites will not need to write platform services such as telephony and unified messaging components. All of these platform components will be provided on the LEADER Network™ as full-featured, scalable services that will be mobile in code base and transparent in resource location. This allows all web applications written on the LEADER Network™ to inter-operate and inter-connect users and workflow without web application and site developers needing to manage or create these services independently. (See LEADER Network™ documentation for more information and detailed descriptions of business objects, application services, web services, hub services and network services).

Business Objects: LEADER Business objects are web server application segments that communicate with an applet and/or HTML client and store information via a DBMS. Most application components in LEADER Meeting™ will be business objects. Business objects are designed around targeted business workflow for specific applications. Most business objects will have a default client interface.

Application Services: LEADER Application services are scalable application components that provide services such as access control list management. An API will be provided for LEADER business object writers to plug into the Application services provided by LEADER software platforms. Many LEADER applications use LEADER Network™ application services because they are designed to operate independently of business object workflow, and can scale in size with relative ease because of their Java Beans and Enterprise Java Beans interoperable software model.

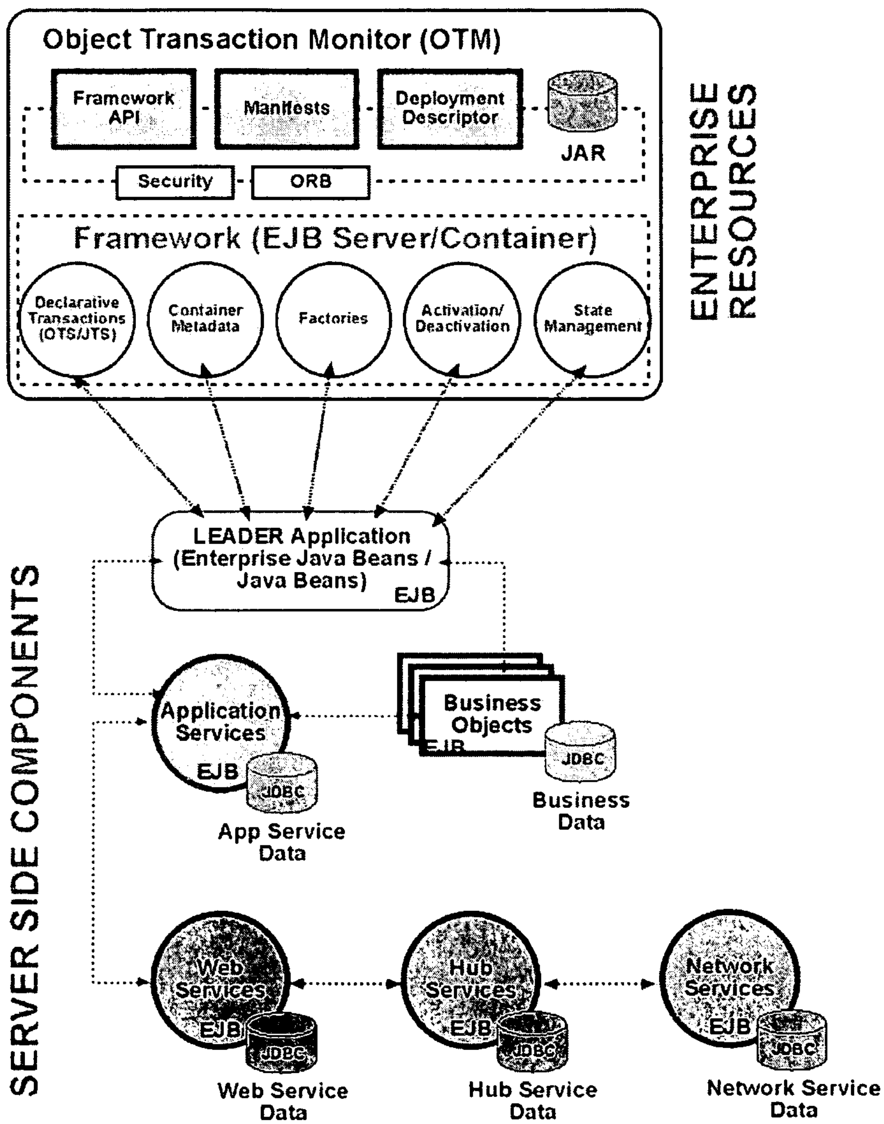


Figure 3

LEADER Meeting™ Component Technologies:

Java Development Kit – The JDK is the core technology that supports all Java™ components in the LEADER Meeting™ application. The LEADER Meeting™ application will use a specific version of the JDK 1.1.x tree (JDK 1.1.8 is currently available). The LEADER Engineering Team and Quality Assurance teams will standardize on one version of the JDK 1.1.x family. The JDK is available at http://www.javasoft.com.

Java Servlets (Java Beans) – Java Servlets are applications written in Java that can be run on a Java enabled web server. A servlet can respond to both an HTTP Get and HTTP Post method. When a Get or Post method is sent to the servlet, the servlet processes the request and is capable of returning response HTML through a Java object.

Information from an HTTP posted form can be processed by the servlet. Java Servlets require the JSDK, available at **http://www.javasoft.com**. While some web servers provide built-in support for servlets, Microsoft IIS does not. ServletExec 2.0 from New Atlanta Communications, LLC, however, will provide support for the servlets in IIS. Demo copies as well as the full version are available at **http://www.newatlanta.com**.

Java Shared Data Toolkit – The JSDT is a toolkit from Sun Microsystems that allows developers to code applications that share data between users on different clients without having to deal with the low level networking protocols normally associated with this type of activity. The JSDT uses a client server model and gives the developer access to Sessions, Channels, ByteArrays and Tokens. Through these four mechanisms, the developer can control a wide variety of activities including data sharing, synchronization of file and data transfers, individual client control of an application resource, and data broadcasting.

JavaMail Extension– The JavaMail Extension allows a developer to interact with mail systems. The JavaMail Extension handles SMTP, POP3, and IMAP. The JavaBeans Active Framework is required in addition to the JavaMail Extension, and an additional extension is required for POP3 support as well. All 3 components are available from **http://www.javasoft.com**.

JDBC – The JDBC, or Java Database Connectivity Kit, consists of two parts. One is the JDBC API, which is provided with later versions of the JDK. The other component is the driver component. These are available at **http://www.javasoft.com**.

Button Applets – Various button applets will be required for navigation and other purposes with the application. 1 Cool Button Tool will create these applets. The software is available at **http://www.buttontool.com**.

PointPlus Java Viewer – The PointPlus Java Viewer displays Microsoft PowerPoint presentations. It is written in Java. This product comes in two parts. One is an applet that displays PointPlus Java presentation files (.jvs extension). The second portion is an MS Windows application that is referred to as the PointPlus Maker, which converts Microsoft PowerPoint files (.ppt extension) into PointPlus Java presentation files. Currently, PointPlus Maker requires user input to make the conversion.

The Engineering team will develop, with the viewer company, a solution so that LEADER Meeting™ end users will only need to upload an existing PowerPoint file. The conversion will be done on the server side. The PointPlus Java Viewer is available at **http://www.net-scene.com/java-site/jshow/index.html**.

File Upload Servlet – LEADER Meeting™ file uploading has two parts. One is on the browser side, and the other is on the server side. On the browser side, any browser that properly implements RFC 1867 will provide File Upload capabilities. Netscape 3.0 or greater and

Microsoft Explorer 3.0.2 implement RFC 1867 correctly. (Versions of MS Explorer before 4.0 require additional plug-in files from Microsoft to work correctly.)

Microsoft Site Server offers support for file uploading. For file uploading in Java, prototype code is available from Andy Madsen.

Translation Services – Currently, the LEADER Software Design Team is testing Systran software for language translation. The purpose of the translation service is to allow real-time translation of chat on the LEADER Meeting™ application. Translation software is still developmental, and is prone to common translation errors. The use of Systran's technology can be viewed at http://babelfish.altavista.digital.com, and the company's home page is http://www.systransoft.com. Also, an enterprise server and web application solution can be cound at **http://transparent.com.**

LEADER Meeting™ Application and the LEADER Meeting Channel™:

LEADER Meeting™ is a collaboration software application accessed from a browser and run on a remote Java enabled web server. It allows users to setup and coordinate meetings online. Once the meeting is defined and setup, a meeting channel is then created as a virtual collaboration meeting space.

The Meeting Channel™ is accessed through a web link or a specific URL generated by the LEADER Meeting™ application. The author or coordinator of a meeting creates a Meeting Channel™ by entering configuration information into the LEADER Meeting™ application. The Meeting Channel™ has a specific title and is a predefined channel for collaborative communications.

LEADER Meeting™ is similar to an application such as Microsoft Word, and the Meeting Channel™ is similar to a Microsoft Word document. The Meeting Channel is a collaborative workspace focused on the workflow of a generalized virtual Internet meeting. This collaborative workspace can be accessed and exchanged from application to application similar to a Microsoft Word Document. The URL can be embedded in documents, web pages, e-mails and other LEADER applications. LEADER Meeting™ allows the user to create a Meeting Channel™. LEADER Meeting™ is a whole product application that can be used in conjunction with the LEADER Office™ application suite or on its own.

Meeting Session:

A Meeting Session is defined as a meeting that begins upon a specified time (whether immediately or at some future date) and until either the last person leaves or the meeting is ended by the original host. The meeting session attributes are configured in the New Meeting Page. A specific meeting ID number is created for reference from the database and is also displayed for the user to write down if s/he wants to quickly find the meeting again via a meeting channel lookup ID.

LEADER Meeting™ Application:

Description: The goal of each LEADER Meeting™ page is to provide the functionality of a full-featured meeting and collaboration workspace with the fewest required user steps. LEADER Meeting™ is an application designed to drive Telephony conference services to the mainstream business and consumer users. By integrating a series of online collaboration tools with conference call telephony services, the user is empowered to conduct effective virtual online meetings. With the easy-to-use interfaces and well-organized and stable tools, LEADER Meeting™ creates a hassle free online collaboration environment that requires minimal software and hardware infrastructure investment by the user.

Users: The user of LEADER Meeting™ is the coordinator or author of a Meeting Channel™ where other participants of the meeting will meet. Participants of the Meeting Channel™ will not see LEADER Meeting™. Participants will only see the Meeting Channel™.

General Layout: LEADER Meeting™ has eight HTML web pages as its user interface. These pages are related to major features of LEADER Meeting™ and can be accessed from a navigation bar at the top of the page. A user can start a *New Meeting*, *Prepare Meeting, Join Meeting*, *Cancel* a Meeting, *Change* a Meeting, Manage a *People* list, change *My Settings* and *Exit* LEADER Meeting™. At the top of the page is a title bar that describes the application.

New Meeting Page: The New Meeting page contains information necessary in setting up a meeting. The "subject" form (see figure 4.1) will be used as the title and reference to the meeting from other applications and in messages and URL links. The "Reason" form (see figure 4.2) contains why the meeting was called, and is a text area box. The "Time," "Date" and "Duration" boxes (see figure 4.3) specify when and how long the meeting last. These boxes are given default values of the current time and date so that the default meeting starts immediately, and lasts approximately an hour as default.

The user gets to specify in a radio button form if this meeting is a public or a private meeting (see figure 4.4). Others can join a public meeting if it is listed or if an outside user knows the location and the general password (if specified in the Meeting Preparation section). A private meeting requires an invitation from the original host.

The invite people pull-down selection (see figure 4.6) will give a list of available people from the "My People" list of the host (an address book feature). If the host wants to manually enter a name and contact information or add a person from the system directory, there is a web link (see figure 4.7) to a page that will display all available users from a directory. On the same page is a manual dial-out entry form and a form to add new people to the list that are not listed in the system directory.

For hosts who want the channel to be a permanent or recurring meeting, they can click on a web link (see figure 4.8) that will allow them to store and automate multiple meetings with exceptions and inclusions. In the recurring meeting pages, the host can also create a Meeting Channel™ that is a permanent public/private channel.

There are also a few simple Meeting Channel™ configurations that a user needs to decide upon before a meeting will be scheduled (see figure 4.9). LEADER Meeting™ needs to know if the user will want the channel to automatically close after the last person leaves, if SSI encryption will be used for secure transmissions and if the Conference Call feature is used (since it is a paid feature, not all hosts will want to provide the feature in meetings).

After the form is filled out, a submit button is pressed by the user and a new meeting is setup and scheduled. If the user then wants to prepare materials and other logistics for the meeting, they will click on the "Prepare Meeting" page (figure 4.5).

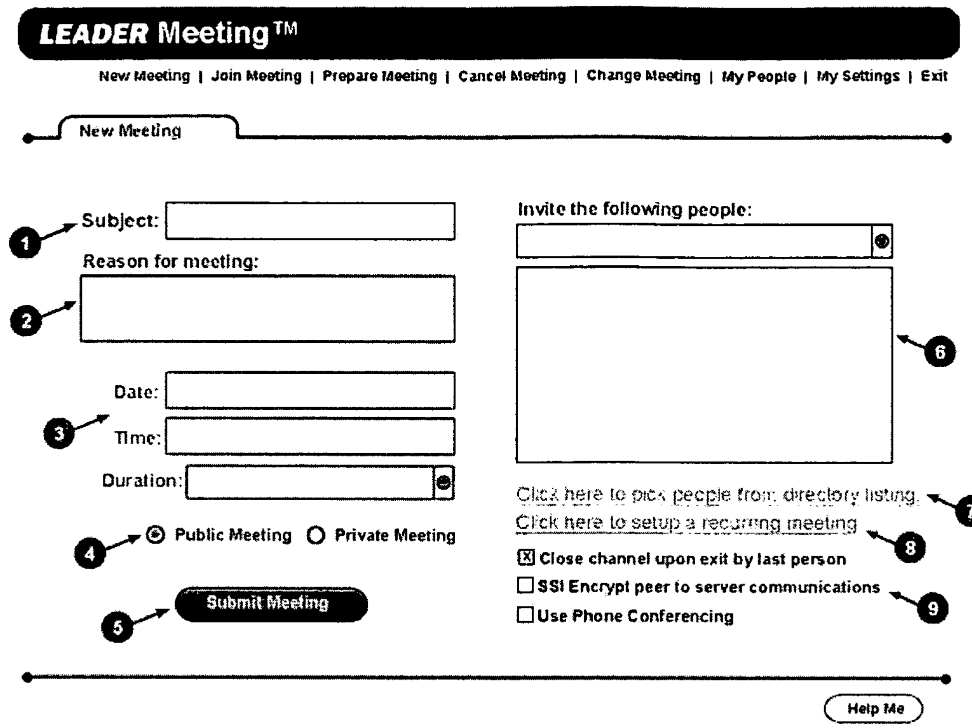


Figure 4

Join Meeting, Cancel Meeting and Change Meeting Pages: The Join Meeting, Cancel Meeting and Change Meeting pages employ a meeting list component (see figure 5.1) and an action button (see figure 5.2) depending on the function of the page. When the user selects the meeting and hits the action button in the Join Meeting page, they are taken to the meeting channel selected. Listed in the Join Meetings page are also saved meetings by the host. For the cancel meeting page, a confirmation page is shown to the user confirming the deletion of the meeting channel. For the change meeting page, the new meeting form is displayed and most of the form fields contain already setup meeting information.

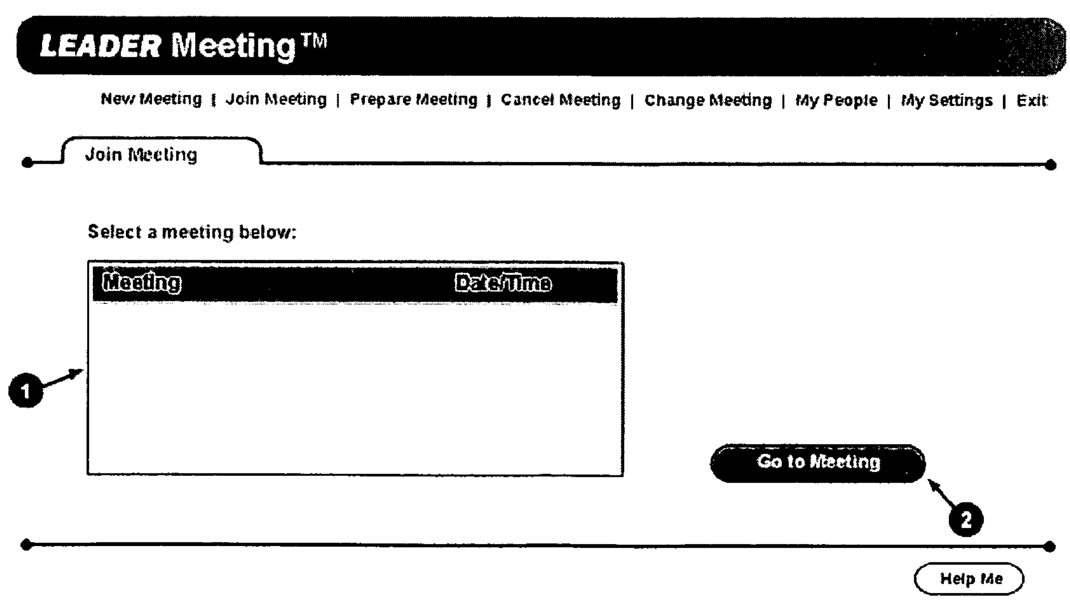


Figure 5

Prepare Meeting Page: The prepare meeting page lets the host write out invitations, invitation delivery method, upload hand-outs, define detailed logistics, send via e-mail pre-meeting reference materials and load previous saved meetings as templates for the new meeting.

My People Page: The people page contains components to allow for a directory search of people on-line to add to LEADER Meeting™ as address book entries. There is also a form to enter new people to put into the application "address book" that are not from the system directory.

My Settings Page: In other versions of the LEADER Meeting™ application, the settings page allows the host to select a telephony service that is available to them. The settings page allows the host to set default values for meetings, a list of plug-in and support links for the software, the host's online information, maximum number of meeting participants, default restrictions to the access control list, etc.

Exit Application Page: Confirms if the host wishes to leave the application and summarizes what the host has done this session.

Descriptive Error Web Page Messages: For every button command, Java™ applet, or Web page, a descriptive error page can be loaded in a separate window that describes an error when it occurs. Clicking a button on the error page also closes the window. Error messages will also include circumstances like incompatible browsers, cookies not turned on, etc. These error messages will be retrieve from the error message database and be displayed through the error message component.

<u>Meeting Channel:</u>

Description: The Meeting Channel™ is designed to be a full-featured collaborative environment designed to provide easy-to-use tools to conduct online virtual meetings. The channel can be an ad hoc channel, a scheduled channel, a recurring channel or a permanent channel for participants of a meeting to visit.

The channel can be listed in other LEADER applications and on web pages over the Internet via a simple Web link or URL address. Once initiated, a permanent channel ID is created by the meeting application as a reference to the meeting channel. This helps a user quickly find the meeting again.

Users: For the Meeting Channel™ there are two types of users, 1) hosts and 2) participants.

Hosts are able to manage the access list for the meeting and specify which tools participants are able to use. There may be more than one host, but only the original host ("main host") may affect the setup and configuration of the meeting.

The main host creates the Meeting Channel™ through the LEADER Meeting™ application. All other users are accessing the Meeting Channel™. Participants get the use of most of the collaboration tools, but will not see host features such as adding and removing participants. Participants will only see the Meeting Channel™ web page.

Registered participants are ones that are listed in the system or directory database. Unregistered participants can be manually entered by the host and invited to the meeting through the Add Person feature.

General Layout: The Meeting Channel™ consists of meeting description area, meeting management area, multi-lingual chat applet, note pad, projector and hand-outs basket.

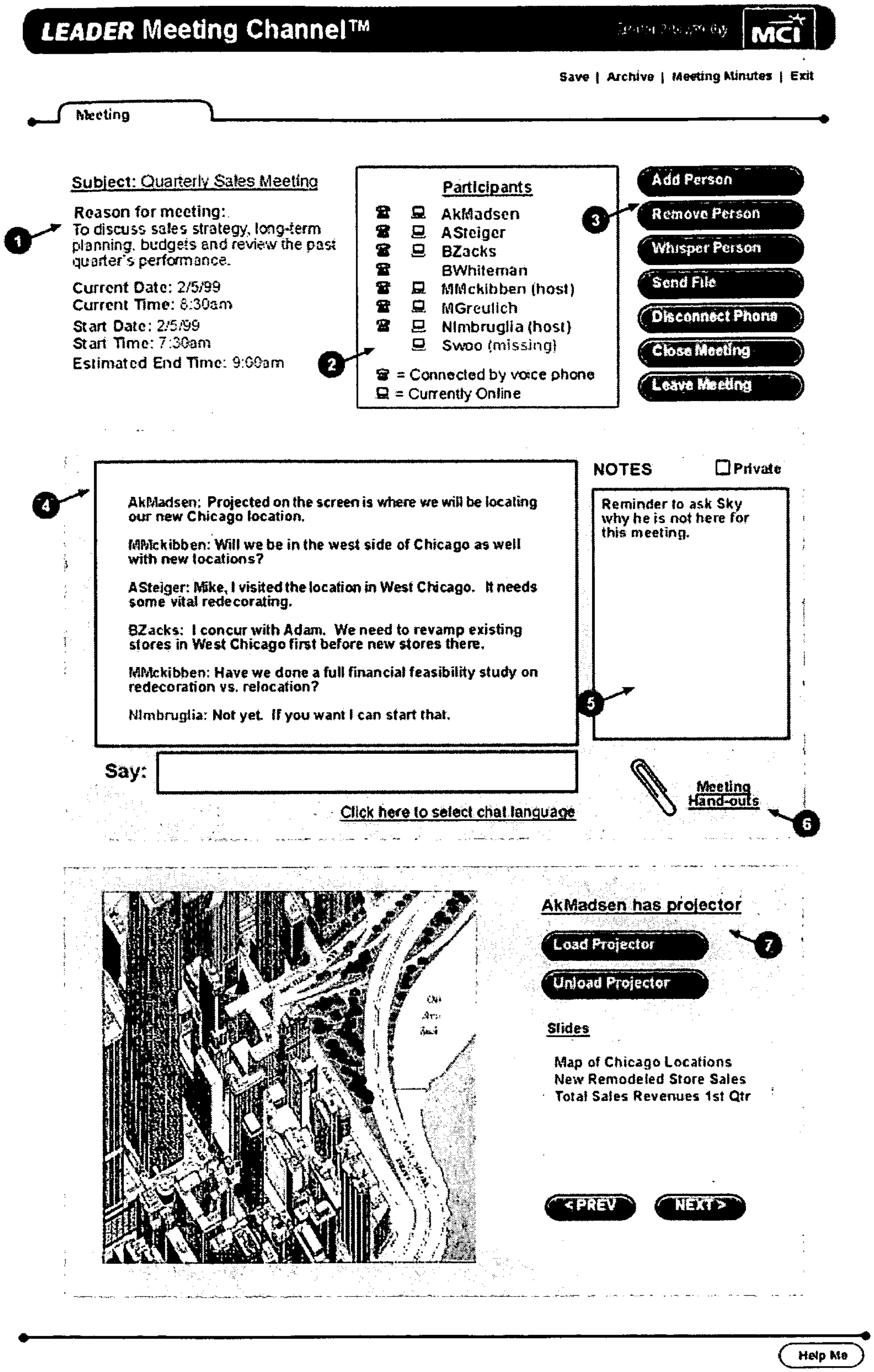


Figure 6

Meeting Description: The meeting description component (see figure 6.1) is a HTML/Java applet panel that displays "subject," "reason for meeting," "meeting start date/time," and "current

time/date" of the meeting. This information is previously entered by the user in the *"new meeting"* page of LEADER Meeting™. The date and time information cycles every minute. The date and time will display local time (as compared to the invitations that will show both host remote time and local time).

User Meeting List: The User Meeting List component (see figure 6.2) displays the meeting participants and shows if a participant is connected via conference call and/or online. Participants who are hosts are also indicated as hosts. Those invited to the meeting and are currently missing are indicated.

Meeting management tool: The meeting management tool (see figure 6.3) is an integrated Java™ applet that communicates with the LEADER Meeting™ web server application. All user meeting and calling activity, such as setup and call management monitoring is administered through this applet. The LEADER meeting web application communicates to an outside telephony connection service such as Qwest, AT&T or MCI.

There are three primary sets of functions handled by the meeting management tool: 1) automated and manual call conferencing administration features 2) host activity administration and 3) participant meeting features.

Automated conference calling occurs during meeting initiation. Each participant (including the host) receives a phone call from the service provider at the specified date and time. The call occurs whether or not they are logged onto the Meeting Channel™. Java™ classes are invoked by the LEADER meeting web server application that send pertinent information to the Internet server, via a Telco's Web API or an equivalent Internet URL connection provided by the Telco.

There are three primary ways a user can connect via the call conferencing features of the LEADER meeting application. First, by being invited to the meeting. During the meeting setup process (described in *"meeting setup"*), the host will add meeting participants into a list of invitees. The second method is by setting up the meeting. The host of the meeting is automatically put onto the conference calling dial-up list as the first person contacted by the conference call center. The third is by manual dial-up, either through the *"new meeting"* page in LEADER Meeting™ or during a meeting session through the LEADER call conferencing features on the Meeting Channel™.

The host can request a manual dial-out or pick from a list of users in the system or company directory at anytime during the meeting session. The call conferencing feature gives meeting participants the opportunity to join the meeting without using a web browser.

Hanging up the phone will automatically log the user out of the conference call, but they will still have an active meeting session.

There is a timed-out meeting feature that asks the user if they still want to be in the meeting if they do not respond with any activity over some system specified interval. If the user does not respond to the timed-out question, the user is then logged out of the meeting. If the user is interrupted from the meeting and is not manually logged out, their transcripts and notes of the meeting are stored for the user in a temporary location.

There are several command buttons available to the host and participants of the meeting. Hosts have specific call conference and meeting administration buttons to manage the meeting. In addition to these host functions, the hosts also have all command buttons supplied to participants.

Host Meeting Tools: Hosts can *"Add"* and *"Remove"* a person (see figure 6.3) to and from the meeting and conference call. Adding a participant will pop up a dialog box requesting information about adding a participant from a user directory through user browsing or the ability run a quick search for the participant. The host may also manually add a person with a phone number or e-

mail address to get them onto a conference call even without the user being listed in the system directories or in the hosts "My People" list.

Removing a person will automatically disconnect their conference call and remove them from the participant list. Once removed, then can only be invited back in by adding them to the list. In cases when the meeting is run as a public meeting, the host will also have the ability to *"Ban"* any user from the meeting.

The original or main host may also *"Close"* an entire meeting. The application checks to see if the user is the main host before offering the button to the client applet. A dialog box will pop up requesting confirmation for meeting closure and will explain what the application will do. Closing an entire meeting will log everyone off and disconnect all phones.

Participants in a meeting are listed in an applet that lists all participants and hosts, and their current meeting status such as being online, connected by phone and if they are a host or regular meeting participant. All hosts are also participants and have user meeting tools as well.

User Meeting Tools: Participants may *"Whisper"* to another participant. This allows them to send a private message to another person. The private message is also listed in the conference board, but is labeled and colored differently to indicate that it is a private message. *"Paging"* a participant sends a beep and a message to another participant's client browser, and also requests a beep to sound via the Qwest conference call connection at the same moment. Participants may also *"Send"* a file to another user, *"Leave"* the meeting or *"Disconnect"* from only the conference call.

Many of these buttons will open a small Java™ applet dialog box requesting information and describing the information requested. The information will be sent back to the server side application and stored in the database.

Chat Applet: A chat application is run on the web server, which supports a Java™ applet client (see figure 6.4) on the user side of the session. This is a simple chat applet that can display multicolored text and graphics images. It is very simple to use and requires the user to basically type in his message in the *"Say"* form and press return to submit it. The message then appears on all screens in sequence next to the author of the message. The chat applet screen scrolls when full and the user may scroll back to see old conference board messages. The Chat Applet will be designed using the JSDT.

The user may also select their language and the Chat Server will translate different languages as if the Chat applet was an universal translator.

Note Pad: The Note Pad (see figure 6.5) is a form that a meeting participant fills in and stores text similar to a message pad. The text message note goes into the meeting minutes when finished.

Projector: The LEADER Projector™ (see figure 6.7) is a simple to use presentation projector that shows presentation slides to all participants simultaneously and controlled by an owner of the projector. The projector will use the token/listener features of the JSDT. When no one has the projector, each participant or host may grab the projector for use. When a participant or host uses the projector, no one else may use the projector. The participant may return the projector.

The projector allows the participant to presentation files for display. These files can be: HTML, graphics files (i.e. jpeg, gif, .bmp, .tif), voice files (i.e. .wav, .au) multimedia files (i.e. .avi, .mov, RealPlayer™, .mpeg) or Microsoft PowerPoint™ presentation files.

With PowerPoint™ files and multimedia files, applet plug-in controls will be available to control the slide show inside a Microsoft Explorer Iframe or Netscape Navigator Frames. If these features are not available in the browser version, then a new browser window will be created.

Clicking on the file in the slide list will jump the projection show to the clicked on file. Clicking the *"Prev"* and *"Next"* buttons will advance the next slide or retrieve the previous slide. Any participant can detach the projector to fit in its own window.

Hot Pointer and Annotations: The hot pointer is an applet tool that maps to the presentation screen and allows each participant of the meeting to click on a point on the screen and a corresponding symbol and name will appear on the other browsers much like a common laser pointer. If the participant double clicks on a spot, he or she will see an applet window that will allow them to add an annotation that will be mapped and stored in the database and displayed on all browsers.

Send Files: The *"Send Files"* button allows a participant to send one or more files to one or more meeting participants. A user selects in the meeting participant list all people the user wants to send a file to and an applet dialog box pops up. The user then selects what file(s) from their hard drive they want to upload. Alternatively, if the browser is incapable of doing this, a new browser window pops up where a file name can be typed in with the location of the file(s). Once submitted, the files will be sent to the server and then sent to each specified participant. The participant receiving the file will be asked where the file(s) should be stored and will have a chance to rename the file(s).

Hand-out Basket: The Hand-out Basket (see figure 6.6) is a general purpose container for any file that participants or hosts want to make available for retrieval from the basket. Each participant is able to download files from this basket. Before a meeting, the host may prepare a meeting by uploading hand-outs to the basket.

Usually, meeting participants will drop off pertinent meeting backgrounder or interesting information in this basket. The Hand-outs Basket is simply a button and text hyperlink to a new browser window that pops up with a list of files and the ability for a person to retrieve, read or add to the basket. Only the host may remove an item from the basket once submitted. If possible, the document or file will be displayed in the new browser window. The Hand-out Basket can be closed at any time.

Save Meeting: The host can save a meeting to be loaded later as a template for a new meeting or save the entire meeting contents for later reference.

Meeting Minutes: This tab will allow users the ability to store and summarize their own meeting notes, and place their notes for the general use of the meeting participants if so desired. The Meeting Summary will have statistics and reports on the meeting and transcripts of the conference board for reference and storage. The user can download this or have it e-mailed to them as an entire transcript package similar to meeting minutes.

EXHIBIT C

created on or before August 8, 1999

The Global Leadership Libraries™ Initiative

Powered by Leadership Software™

How would it differ from current web discussion technology?

	Current Forum Technology	Leadership Software™ Technology
Content	Provider-controlled	User-controlled
Intellectual Property	Provider-owned	Host-owned
New Content uploading	Limited types	No type limits
Dynamically linking content	Not possible	"On the fly"
Interface	Plug-ins	Simple browser
Telephone and fax ready	No	Integrated
Security	No	Host-defined
Search	Limited, slow, mechanical	Powerful, fast, networked

Insight Inside®

click here to continue >

Current Forums Shortcomings

- Gatekeepers
- Technician-controlled and filtered
- Innovation dampened
- Search limitations

Leadership Library™

- **No Gatekeepers**
- **User-controlled, no filters**
- **Innovation unfettered**
- ***Insight*-enabled**

LEADER

TODAY'S TECHNOLOGY:
Groupware, decision support, EIS, OLAP; customized to vertical specialties: commerce, health care, petroleum, financial, insurance, etc, are technician dependent, difficult to change.

Conclusion - points of felt need

"Golden" Solution Thread

- Leadership is a universal need.
- Leadership is lacking everywhere.
- Intuition is a critical factor in leadership.
- Technology has failed to support leadership.
- Automation must support, not attempt to replace leadership
- A new technology concept is required.
- Vision, purpose, talent utilization are keys to leadership
- Social structure must generate the intellectual capital
- Performance must able to be gauged objectively

LEADER and Leadership Software™

universal structure that can be specialized to niche uses by the users themselves, changed "on the fly"

Insight Inside®

click here to continue >

EXHIBIT D

created on or before August 26, 1999

Draft

LEADER Project Functional Specification

1. Overview of LEADER Board

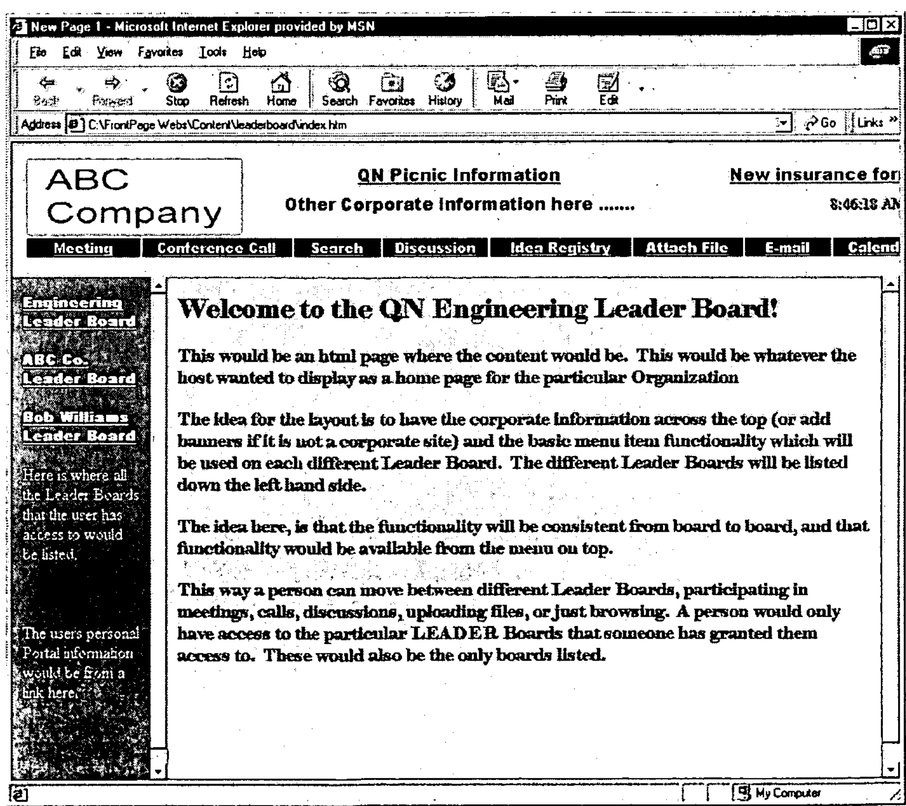
A Digital Leaderboard™ is the focal point technology of Leadership Software™. Leadership Software™ is a new class of software supplying Leadership Software Services™ - web-based application software that coordinates leadership collaboration across enterprise Intranet and Internet.

2. Background

Computer technology has failed to address the needs of leadership. Information workflow and leadership workflows coexist in organizations, but it is information workflow that has received the bulk of attention and successful automation with regard to technology. With the advent of a commercially viable Internet, the browser, and the settling of the desktop wars on Windows, leadership workflow can be addressed successfully for the first time in the history of modern technology. Leadership communications is a dynamic blend of factual and intuitive elements. Computers are able to deliver the factual portions efficiently, but do little to enhance the intuitive ones. Part of this problem occurs because the approach to automation support for these functions has been wrong. The focus was on replacing human intuition algorithmically rather than on incorporating human intuition as the central component and bringing automation tools up alongside this uniquely human ability. Human relationships and communications are the most universal "commodities" of exchange with regard to intuitive decision making, not data. Data helps, for sure, but it is relationships of among people, projects and information that hold the key to Digital Leaderboard™ design.

3. Components

3.1. LEADER Desktop



The LEADER Desktop is the look and feel of the interface for the user. It provides the user with a way to interact with the various components of the LEADER Board. The desktop will be broken into 3 distinct areas. The top area is for static information. If the board is run for a particular company, their logo will be placed here, as will general information about the company. This area will be controlled and administered by the companies designated LEADER Board administrator (See System Administration below). The information in this top portion of the desktop will be stored in a database file,

so it can be dynamically changed. In other words, while the company logo may appear on the company LEADER Board, a different logo may appear on a different LEADER Board. As a board is selected, it will load preferences for this top area. In non-company specific versions the LEADER Technologies Logo will be placed here and advertisements will alternate in this space.

In the lower part of this space will be the primary desktop menu. This menu will contain all the standard functions, which are available on every LEADER Board. By clicking on any of these options, the main work area will be changed to the specific one the user selected. The options available are: Meeting, Calling, Documents Filing, Searching, Messaging, Idea Registering, Discussing, Note posting, Calendar, Action Items, Security, and Administration.

Each of these selections will be discussed in the following paragraphs.

In another area will be the section for selecting the particular LEADER Board. At a minimum a person will have a personal portal, which will be there own personal LEADER Board. They may also have access to many additional LEADER Boards depending on their position in the company and the desires of the people running the particular Board. For a more complete explanation of security and LEADER Board access see the Security section below.

When a user selects a LEADER Board to work with, the work area will reflect the information from that board. The menu options on the top will remain the same, as will the various Boards a person has access to.

The main workspace on the desktop will be where the requested information will display. For example, if a person selects their personal portal and calendar, their personal calendar will appear, while if they choose a particular LEADER Board and Discussion, they will be placed in the discussion function for that particular board.

The purpose of the desktop is to provide a common appearance and function for each of the various tools a person has, as well as the various boards a person may have access to.

There will be different desktop motifs, which will allow a user to customize the look and feel of their desktop without affecting the functionality. Basically, the motifs will only affect the appearance of the screen, and all the desktops will offer the same functions. Additional motifs can be added in future versions of the application.

3.2. LEADER Meeting

See LEADER Meeting Specification in the following section.

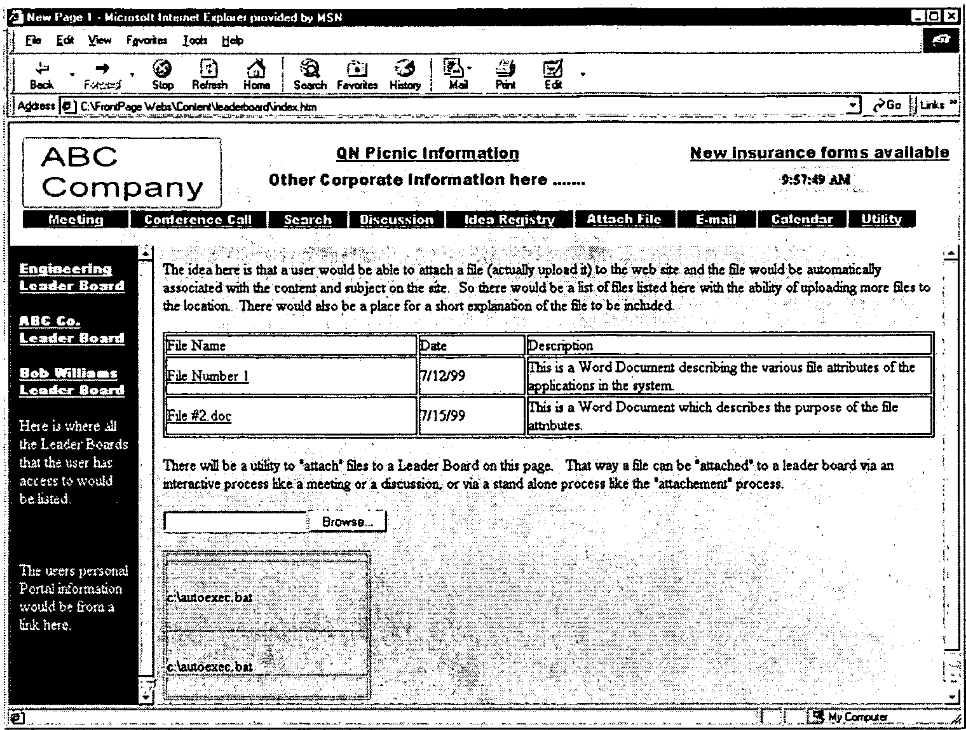
3.3. LEADER Phone

See LEADER Phone Specification in the following section.

3.4. Document Filing

The term document filing refers to the practice of relating or associating files with a particular topic on a LEADER Board. It is intended to follow the motif of filing a document in a filing cabinet along with the other information, which is associated with that particular document. There are no boundaries to they types of files which can be filed. Even if a person does not have the necessary application for a file on a LEADER Board, they could still upload or download it. In order to avoid any possible confusion with the terms upload and download, they will be avoided in the application. Instead the terms filing and retrieval will be used. So, if a person wishes to associate a file with a topic, they would select the file button, they will be prompted to select the document or file to associate with the board, and then it will be transferred for them. The intent is to not make it obvious that files are being

transferred from computer to computer, but rather to have the impression that a person is working on a single desktop.



The document filing section will display a list of files that are already associated with a particular board with that files description. Any document that has been previously filed, or any file that has been associated with a meeting or discussion will also appear here. The working window will display a scrolling list of files that the user can select to view, edit, upload, or download.

3.4.1. File Upload

When a file is uploaded, the user will be prompted to enter the purpose of the file. The system will already know who is uploading the file, so it will be related to the person automatically, it will also know which topic the file is uploaded to. What won't be clear is the purpose of the file and if that can be retrieved from the user then it can be added to the LEADER Board File Description.

When the file is saved to the board the database will be updated with the file name, the description of the file, the size of the file, the date the file was loaded, the relationship to the person who uploaded the file, the board the file was updated on.

3.4.2. File Download

Downloading a file will be necessary if someone wants a copy of a file on their local machine or if they need a copy on a portable media. This option will allow the user to select a file to download from a list of files on a board and then copy it to their browser's machine.

3.4.3. Viewing or Editing a file

The user will have the opportunity to edit a file that is already on a LEADER Board. They will be able to select the edit option on the board and update the file. They will not be able to overwrite the file, however. The updated file will have to be saved to a new filename. (We need to talk about this some more)

Draft

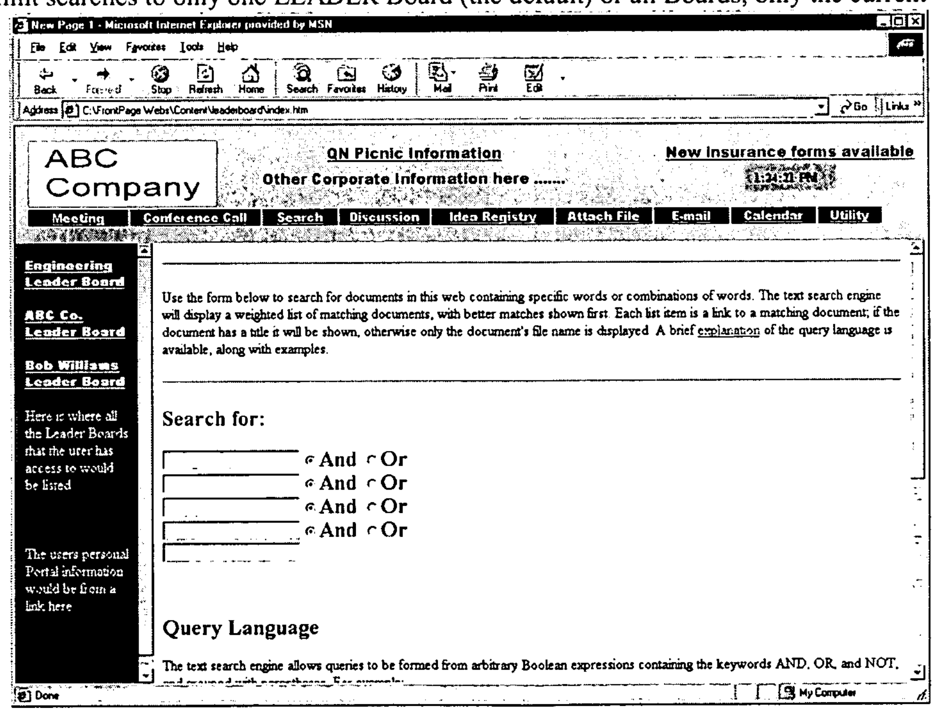
When this option is selected, the file will be downloaded, and then it will be opened for the user with the application the user has associated with that particular file type on their system. In other words, the file will be opened with Microsoft Word if the user has Word associated with .doc files.

Sample file types are listed here:

File Type	Application
.doc	Microsoft Word
.ppt	Microsoft PowerPoint
.xls	Microsoft Excel
.avi	
.wav	
.ra	

3.5. Searching

Searching for information is one of the fundamental ways to get information on a LEADER Board. The search option will allow the user to select key words to search on, as well as how broad or how limited a search they would like to perform. The search window will contain 5 compound search input criteria to make searching as friendly as possible. The user will be able to search for one item, then select "AND" or "OR" and search on another item, and so on up to 5 items. The users will also have the options to limit searches to only one LEADER Board (the default) or all Boards, only the current application (Meetings, documents, calls, etc.) or all, and only files associated with themselves or all users. This will allow the user to limit their search range and speed up their searches, or maximize the number of options on the search.



The searching results will be displayed in a scrolling window and the user will be able to select any of the items and view them on-line. All selections will be opened with the application that is associated with it. For example, if the information selected were from a meeting, the meeting application would be used to open the meeting and view the contents.

(Searching is a critical component of this system. If there is a better way to handle this, it should be explored.)

3.6. Messaging

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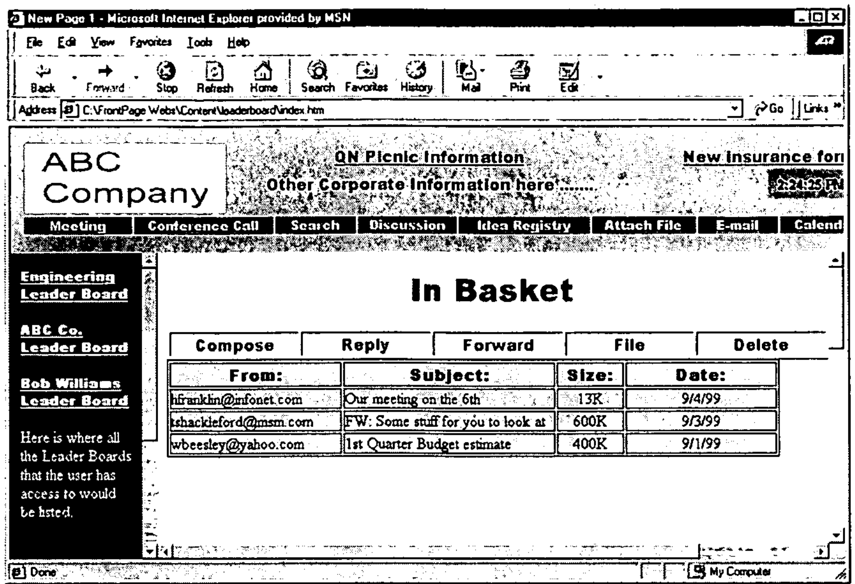


E-mail is one of the fundamental ways business people communicate. The e-mail selections on LEADER Boards will be broken down into 2 categories. Individual e-mail will be available at the user's portal. Each Board will also have it's own e-mail account to support getting mail to and from a group LEADER Board. Each type of e-mail account will have the same type of functionality. It will have an inbox, mail composition, forwarding, replying, options, and filing. A user may not want to use their portal mailbox as their default mailbox, and in that case, their portal inbox can be forwarded to a personal mailbox. (We need to talk about this).

When the e-mail menu item is selected, the inbox will be displayed with a scrolling window of mail. Each piece of mail can then be read, filed, forwarded, ignored, or replied to. In an attempt to categorize everything when it is touched, when a piece of mail is opened, replied to, or forwarded, the user will be asked to select a file to put the message in. They will be allowed to change this in the future, but the system would like to get all the information as it is processed categorized.

3.6.1. Portal e-mail

Portal e-mail is the same thing as personal e-mail. It is the e-mail account that is associated with a users individual portal. This mail account will be strictly for the individual who owns the portal and no one else will have access to the information there, unless the user grants it to him or her.

3.6.2. LEADER Board e-mail

LEADER Board e-mail is very much similar to Portal e-mail only it is associated with a LEADER Board and not a person. While there may be only one person who maintains it, or does the filing, it still is accessible to all members of the particular group.

In this case, the inbox serves as one of the primary methods for getting information associated with a topic. An e-mail message can be forwarded from a personal portal to a LEADER Board inbox, or it could be sent there directly, or it could even be a fax or voice mail message which is sent to the inbox.

As the information in the inbox is opened, the user will be asked to file the information. This way the information will be moved from the inbox and filed to the proper categories and locations.

3.6.3. Zip Notes

Another form of e-mail is found in the meeting application and it is called zip-notes. It is different from the other e-mails in that it is directly associated with an event such as a meeting. In other words, if a person wants to send out a quick note of information while a meeting is going on, they

could use a zip-note and then that note would be associated with the meeting. If they wanted to send an e-mail during a meeting which was not part of the meeting and they didn't want it associated with the meeting, they would send regular e-mail from their own portal. The zip note is useful to send off a quick note (it could even be sent to a person's e-mail portal), and the primary difference is that the notes sent from an event are associated with an event. Zip notes will otherwise operate just like other e-mail compose selections. The person's name will be automatically put into the return address block and other e-mail selections, including attachments, will be available too.

3.7. Voice Mail

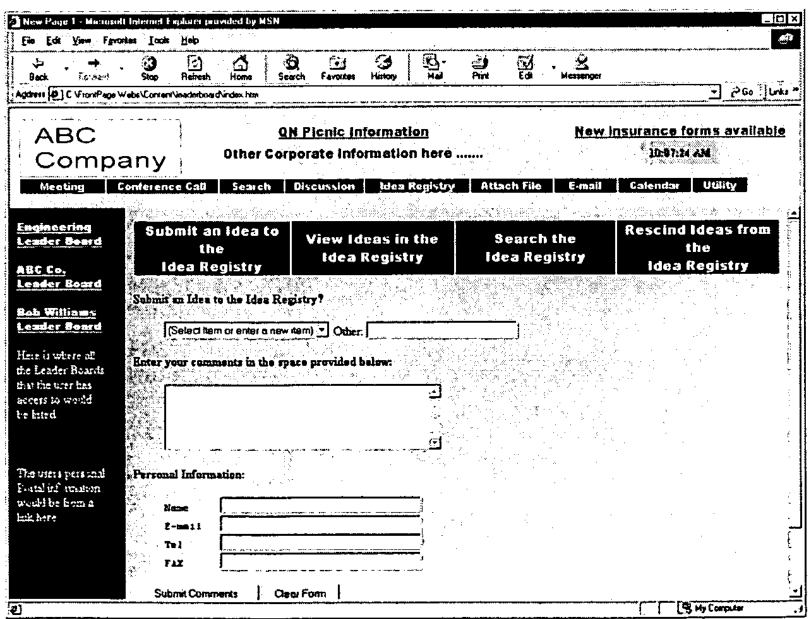
Voice mail will be moved (copied) to a LEADER Board in much the same way as e-mail would. From inside of a voice mail system, a person can forward a message to the LEADER Board and it will show up in the universal inbox. When the host (or designee) of a LEADER Board listens to the message it will be associated (categorized) just as e-mail messages are. The host will also be prompted to put in a short description of the message for filing and tracking purposes. This way everyone one else will not have to listen to the actual message (although they could), they could just read the recap and know what the message was about.

A specific use of this technology would be to leave a voice message in a Universal Inbox from a mobile phone and have it be used as a reminder or a quick messaging service. It could also be used to capture important thoughts on the board when a person is not at a computer.

(We need to more fully explore the options here.)

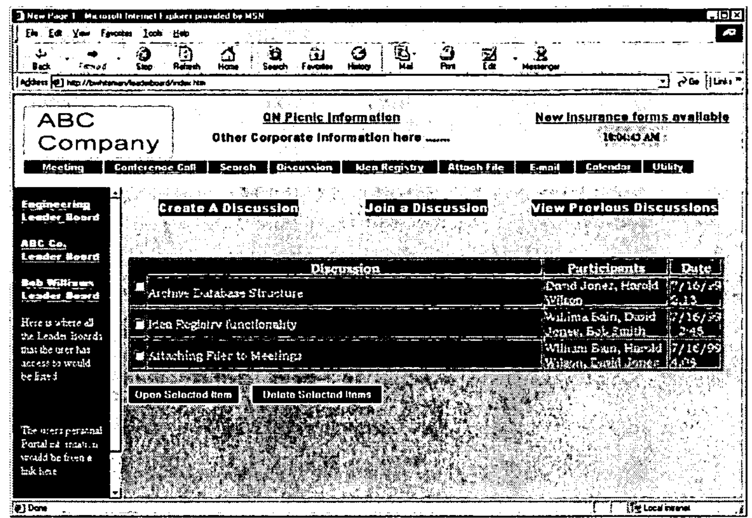
3.8. Idea Registry

The Idea Registry is a way for a person to register their ideas so they can feel free to share those ideas and not have to worry about them being taken by someone else. This registry will provide a way for a person to submit an idea and they will receive a date time stamp notification from the registry acknowledging the submission of the idea. The Registry will maintain ideas as long as the submitter wishes for the idea to stay registered. This is an example of the Idea Registry. The Idea Registry should operate similar to the patent office, in that it provides a way to claim credit for an idea and feel confident that the idea, or intellectual property, has been recorded and saved in a permanent record. This way no one else can claim credit for a particular concept. The intent is for users to feel comfortable in a collaborative environment and not have to fear having an idea stolen by someone else after it was presented in a meeting. The Idea Registry will be a freestanding application separate from the LEADER Board. It will be available for people outside of the LEADER Board environment, but the LEADER Board will provide an interface into the Idea Registry to make it particularly easy to use.



3.9. On-line Discussions

A discussion is basically an on-line chat facility. This is necessary to support communication between people in separate locations, and it also is useful in capturing the information from a conversation. When this option is selected, a user will be provided with a chat utility screen. They can then invite other users to join in the chat, or join other chats in progress on LEADER Boards they have access to. This discussion channel will capture all the information in the chat and save it to a file referenced by the hosting board. The user will have the option to review chats at a later time. The chat functionality will identify each of the participants in a discussion, and will capture the information shared in the chat as well as the time, day, and length of the chat. Chats must be very easy to set up and use, because they occur so often. The discussion function will also allow a person to capture a conversation that has occurred off line. In other words, if two people spoke on a car phone and they wanted to capture the information in the system, they would be able to enter a day, time, participants, and some notes from the conversation into a discussion note form.



Future consideration: when the technology allows for voice recognition, this would be the location in the system where that would be added. Perhaps the most difficult aspect of capturing information during this process is the unstructured conversations that take place. Whether they are telephone conversations or chats by the water cooler, there are valuable pieces of information, which are passed when a person is not working at their system. The discussion board is an attempt to capture the information from a phone conversation, or even recap a conversation from an informal meeting. A significant advance will occur when a person can just speak and their words will be transcribed on the system.

3.10. Notes

Notes posted to the board can take many forms. There will be instances where some one wished to share information with a group but that information is not associated with an event. They could send e-mail to all the people (which would be stored in a person's corporate e-mail account) or the preferred method would be to post a note to the LEADER Board. That way, any person who visited the board would see the note on the board. This could take many forms but the idea is to use a post-it kind of motif for putting information onto the board. It is not expected that the system will audit information retrieval. So if someone sees or does not see something the system will not track that. Traditional e-mail with receipts have been very good at that, and they would continue to be used.

3.11. Calendar

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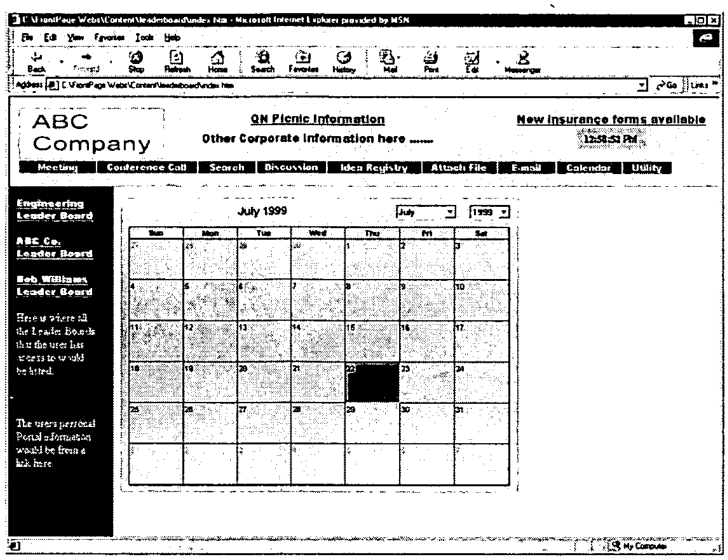
The Calendar portion of a LEADER Board provides users with a calendar for easy reference, but it also provides a shared schedule for tracking important events like deadlines and milestones in a project. A user will be able to enter an event or a meeting or any other item in the calendar providing they have update access to the LEADER Board. Those users with only read access will only be able to view the information on the schedule. This calendar could also be used to schedule shared resources like conference rooms, or equipment, or virtually anything else that is scheduled. The calendar will default to the current month and day, but will also be able to jump to another month, or scroll forward (or back) one month at a time.



Additional functionality could be added where a user could enter an event as recurring, as in a meeting that happens every week. It would also be beneficial to connect the schedule with the meeting channel, so that when a meeting is scheduled in the meeting channel it is automatically recorded in the schedule.

Possible additional functionality here would be to page someone when they have a scheduled appointment.

3.12. Action Items

The action item selection provides the group with a common to-do list. This will support collaborative efforts within teams. Each board will have a to-do list, so an individual portal will have a to-do list and a group LEADER Board will have a list. The lists will be separate. The list on the LEADER Board will be there so the group can see what work needs to be done, who is assigned to do it, and what the status of the work is. As to do action items are created, they will be assigned to a person. That person will be able to update status, close the item, or provide a description. All work done on a to-do will be stored as other pieces of information on the LEADER Board. For example, a note will be stored as a note. A document will be stored with the documents, and so forth. The idea is that the information will be immediately available on the to-do via a link but the information will actually be kept with the information of a similar type or category.

3.13. Security

The individual owners of the boards will primarily handle security on a LEADER Board. They will be responsible with granting (or revoking) access to any other member of an organization. A person can grant any other member of the organization access to a LEADER Board where he or she has security access. At a minimum this will be an individual portal, but it could also be any number of other LEADER Boards.

When a person is granted access to a LEADER Board, that board would then become available to them on their main desktop.

The following are the types of access available for a LEADER Board:

Access	Rights

Administration	The user has the authority to update all information on a LEADER Board.
Operation	This user will have the authority to read and write to all files and update the Universal Inbox.
Write	This user has the authority to update all files on the LEADER Board, but does not have access to the Universal Inbox.
Read	This user has the authority to view all files on the LEADER Board, but does not have access to the Universal Inbox.
Audit	Read-only access to all data on a LEADER Board.

There will be some organizational security in the system as well. Specifically, the organization may require an auditing function. Auditing or oversight would be supported by the audit access permission. Audit permissions can be granted on a board by board basis, or globally for all a companies LEADER Boards.

A Company will have to have a system administrator for the whole system to manage global access controls.

We expect that access to LEADER Boards will be granted to people who are outside of a particular company. If this outside agent is providing functional expertise we refer to them as a Luminary. They would be a subject matter expert given specific access to a LEADER Board or a series of LEADER Boards.

3.14. Administration

This system will have a number of support functions, which it will be able to perform. A host will want to move data from the active Leader Board to an inactive status. This could either be done at the completion of the project or the end of a quarter or Fiscal year, or tax year, or any point in time. The host will be able to select a high level function, like a topic or a date, and they will be able to archive all that data off from their board and into their archived or historical board. Once the data is moved it will be deleted from the active LEADER Board. This way a person's data will exist either in the active board or the archive board. The Librarian application would also be located here. The Librarian would allow a person to view (checkout) information that has been submitted to the Library.

Future considerations: Other miscellaneous tools could be added here, for example, a calculator, or a timer, or any number of other tools.

4. General functionality

4.1. LEADER One-Touch

This is not a selectable option from any menu, but rather is consistent and shared functionality of a LEADER Board.

The expectation for the one-touch system is to be able to relate different pieces of information together, in the database file, just by using it in the system. In other words, just by using an e-mail message, that message would be associated with you (the person who touched it), the person it came from, it would be associated with the subject, or a new subject (Topic) could be created. The intent is to automatically have information related to each other as it makes sense based on the way it is used in the system. The database structure will support multiple different kinds of relationships, which will

allow for this functionality. What we are doing is 'helping" the users of the system by creating the links for the data and not making them do it.

We recognize that the more we ask the user to do, the more we will be at risk of the system not delivering what we would like it to. So we need to figure out ways to get information and topics together automatically. Getting people and information should be easy. Any time anyone touches some information they are associated with it. But getting the topics and the information together will be a little trickier. What we have to do is have topics opened on a LEADER Board and then allow information to be associated with it. In other words in a LEADER Board on Product Development there would be multiple products listed. Each one of them could be a topic, and if there was a word document created about one of the products it would be uploaded to the board and made available for everyone. This way, the person does not have to put a categorization on the file (nor have to agree with the categorizations of the group), but rather just upload the file to the board and it will be related to the topic it is loaded to and the person who loaded it.

In all cases, any possible relationships which can be made by a user accessing a file, needs to be made.

4.2. Remote Procedure Calls

Remote procedure calls in the database will be used where feasible or possible. This will limit the amount of processing that the client (browser) machine will have to process via Java applets, or that that the web server will have to process. If there are repeatable functions that the database has to perform, a database procedure will be written and all developers will be notified that the procedure is available.

4.3. Modular design

Each component on the LEADER Board will be modular in that it will be able to stand on it's own as an application and will not require any of the other components to operate. It is not expected that any of the components will be used separately, but the modularity will allow for incremental testing and deployment. This modular design will also provide a standard interface with the HTML screens. Each of the component modules will be callable via a series of parameters depending on how it will operate with other components. For example, the schedule will be called with no parameters and it would call the default schedule with the current date. If it is called with a specific date it will display that date first, and if it is called with a specific appointment or meeting, it will jump to that specific meeting. Each of the modules will support this parameter based calling feature.

4.4. No plug-ins

The system will not require additional plug-ins to operate. It will be created with HTML and Java and will not require additional software of any kind to operate.

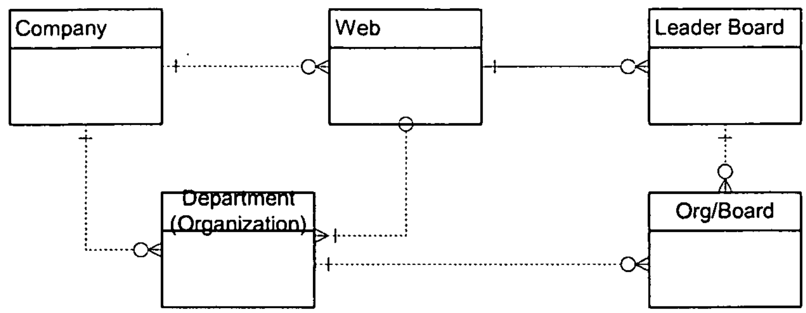
4.5. Multi-lingual

This application will have to support customers working in multiple languages. In other words, workers may not all be located in the same company, and we would like for the various workers to be able to communicate (at least on the written portions of the boards) in their native languages and let the application do the translations.

5. Organization

The organization of LEADER Boards within a company is very similar to the relationships between all of the pieces of data in a LEADER Board. What this means, is that a LEADER Board can have a relationship with one, or many other, LEADER Boards, the relationship is not mandatory, and the people who have access to the board are not limited to any particular organization in a company.

The following diagram reflects this relationship:

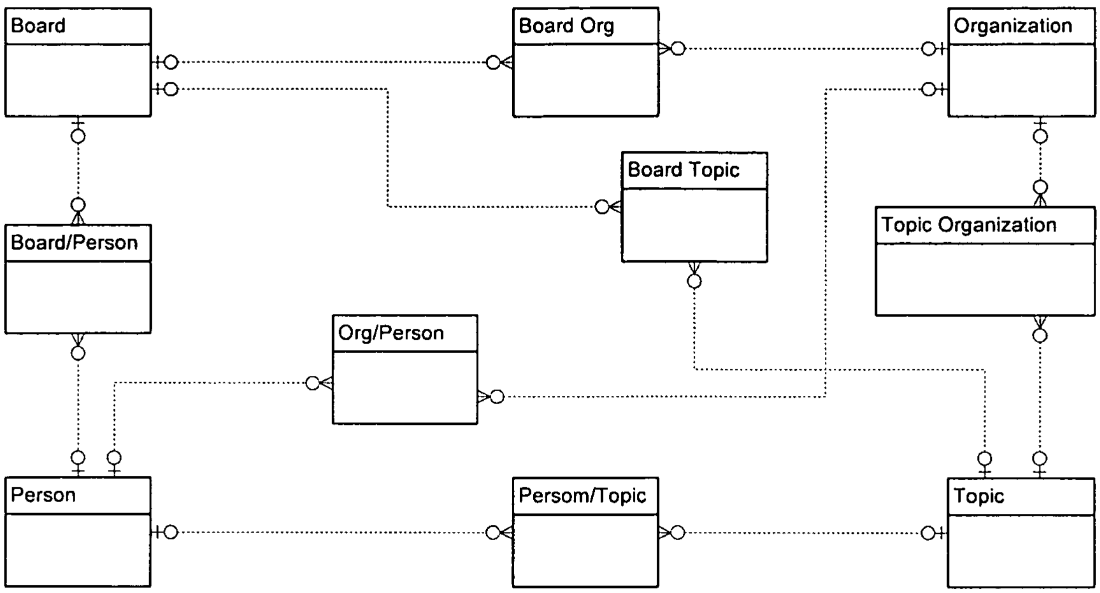


What this means is that a company can have Webs of LEADER Boards. A Web is defined as the management structure used by a particular company. So, if a company has a hierarchical structure, their Webs will reflect a similar structure, but if a company is more into teams and workgroups, then the Web structure will be more free form and dynamic. This is not to imply that one structure is better than another, that is best left to the business analysts, rather that the system has to be able to support multiple management structures. It is also possible that the structures used by a company will change over time. That is why it is so important that these relationships be defined in a database and not written into application code. This Web structure will primarily come into play in the implementation of the accesses for various boards.

6. Database

The database will be designed in such a way to maximize the relationships of information. There is no single prescribed company organization, nor is there a single approach to supporting companies, so there can not be a predefined database schema, which will be used by all companies in the diverse ways they do business. The LEADER database schema is created to be flexible enough to support the relationships between the events where information is created, and the people who are responsible for the information. In other words, it is not created to support a predefined business process, but rather the information needs of the business process. The schema has virtually no mandatory relationships for this reason. All data can be optionally related to each other.

Below is a rough and beginning Entity Relationship Diagram for a LEADER Board. Each of the entities for a LEADER Board will be defining in the coming weeks as will all the attributes. This will be done via a series of e-mails and a meeting at the Columbus LEADER Offices.



7. Approach

7.1. Development tools

7.1.1. Java Version

JDK 1.15, JSDK

7.1.2. Java Shared Data Toolkit

The JSDT is a toolkit from Sun Microsystems that allows developers to code applications that share data between users on different clients without having to deal with the low level networking protocols normally associated with this type of activity. The JSDT uses a client server model and gives the developer access to Sessions, Channels, ByteArrays and Tokens. Through these four mechanisms, the developer can control a wide variety of activities including data sharing, synchronization of file and data transfers, individual client control of an application resource, and data broadcasting.

7.1.3. API(s)

JavaBeans, Java Database Connectivity (JDBC), Java Shared Data Toolkit (JSDT), Java Telephony Application Programming Interface (JTAPI), JavaMail Extension,

7.1.4. JavaMail Extension

The JavaMail Extension allows a developer to interact with mail systems. The JavaMail Extension handles SMTP, POP3, and IMAP. The JavaBeans Active Framework is required in addition to the JavaMail Extension, and an additional extension is required for POP3 support as well. All 3 components are available from **http://www.javasoft.com**.

7.1.5. JDBC

The JDBC, or Java Database Connectivity Kit, consists of two parts. One is the JDBC API, which is provided with later versions of the JDK. The other component is the driver component. These are available at **http://www.javasoft.com**.

7.1.6. Button Applets

Various button applets will be required for navigation and other purposes with the application. 1 Cool Button Tool will create these applets. The software is available at **http://www.buttontool.com**.

7.1.7. Supporting Products

PointPlus Java Viewer – The PointPlus Java Viewer displays Microsoft PowerPoint presentations. It is written in Java. This product comes in two parts. One is an applet that displays PointPlus Java presentation files (.jvs extension). The second portion is an MS Windows application that is referred to as the PointPlus Maker, which converts Microsoft PowerPoint files (.ppt extension) into PointPlus Java presentation files. Currently, PointPlus Maker requires user input to make the conversion.

The Engineering team will develop, with the viewer company, a solution so that LEADER Meeting™ end users will only need to upload an existing PowerPoint file. The conversion will be done on the server side. The PointPlus Java Viewer is available at **http://www.net-scene.com/java-site/jshow/index.html**.

File Upload Servlet – LEADER Meeting™ file uploading has two parts. One is on the browser side, and the other is on the server side. On the browser side, any browser that properly implements RFC 1867 will provide File Upload capabilities. Netscape 3.0 or greater and Microsoft Explorer 3.0.2 implement RFC 1867 correctly. (Versions of MS Explorer before 4.0 require additional plug-in files from Microsoft to work correctly.)

7.2. Status

Standard LEADER Status reporting will be followed.

7.3. Configuration Management

Standard LEADER Configuration Management will be followed.

7.4. Quality Assurance

Standard LEADER Quality Assurance reporting will be followed.

7.5. Development Environment

7.5.1. Database Software

The system will be built with Oracle 8.0.

7.5.2. Development Software

Java Software will be developed using Java 2.0.

7.5.3. Platform

The development platform will be a Server located in the LEADER Offices in Columbus. It will house both the Web Server and the database server. It will support a Java compatible web server capable of running Java Beans (Java Servlets)

8. Production Requirements

8.1. Browser

LEADER software will require users to have Internet Explorer 3.0.2+ or Netscape Navigator 3.0+. Some select features may require 4.0 or greater versions in each respective browser. When a user lacks the correct version, help pages will be created to inform the user of where to download the newer components/software and an associated link.

8.2. The production platform

The platform will actually consist of multiple systems for scalability. There will be a single database machine with a cluster of web servers. All the platforms will run some flavor of UNIX (at this time not selected).

The production database will be Oracle.

8.3. Redundancy

There will be multiple production sites for the LEADER software. We will not be dependant upon any one particular site for all production needs. Each production site will have a completely operational system and will not be reliant on another site for any of it's processing or data.

The telecommunication capability will also be redundant so there is not a single point of failure in any of our production facilities.

8.4. Replication

The database will be replicated between the multiple production sites so that if one of the production systems were to go down, there would be another system immediately available to take it's place with all of the current data for both systems (less the limited amount lost in between replications).

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LEADER Meeting™

1. Software Description:

LEADER Meeting™ will be an easy-to-use Web application designed to be hassle free, quick to learn and requires only basic Web browsing skills. With LEADER Meeting™, users will be able to setup meetings with web and telephony technologies integrated into a virtual online meeting environment. LEADER Meeting™ is a full-featured collaboration application that runs on a Java™ enabled web server and accessed through a standard web browser.

LEADER Meeting™ provides easy-to-use tools to efficiently organize collaboration services for groups of users. Among the features are the ability to setup conference calls, display presentation materials and documents using an online projector, setup a collaborative workspace, send files/e-mail/faxes/messages to other meeting participants, communicate in collaborative multi-lingual online chats, take meeting notes/summaries and manage meetings.

LEADER Meeting™ is intended to be one of many web applications offered in the LEADER Office application suite. Users who log into a LEADER Web™ will usually find LEADER Office™ bundled with any LEADER Web. In the future, users of LEADER Meeting™ and LEADER Office™ will be able to access, use and link to services and applications on the LEADER Network™ at LEADER.com to be released in year 2000.

2. Project Goal:

The goal of this software prospectus is to define the product design, software features, project scope, user workflow and general implementation issues related to building a full-featured collaboration application. In other words, it is a design and product blueprint.

From this software prospectus, LEADER software engineers will design and implement an application tier and database that will deliver the specified services and products to a thin Web browser client. The engineering specifications and working documents should be developed from the information contained in this document. Included in the engineering document are also quality assurance plans, versioning plans and change order guidelines.

During the engineering process, error handling and deployment specifications will be developed. A help index system for the software and on-line tutorial will also be developed concurrently with the software engineering process.

The engineering team will also submit development resource requirements and a project schedule for completing LEADER Meeting™ prior to the commencement of software development. This project is intended to be a fast-track development project. The engineering team must coordinate and meet the action milestones listed below. LEADER Meeting™ will be the responsibility of the LEADER Office™ Application Team. The LEADER Office™ Application project team will work closely with the LEADER Web™ project and the LEADER Network™ project teams.

Action Milestones for LEADER Meeting™	Due Date
Software Engineering Specifications	May 20
All Software Project Plans	June 1
Complete Acquisition of Project Resources	June 15
Software Architecture	June 15
Alpha Product ("Feature Complete")	September 1
Beta Product ("All known bugs, pre-release")	November 1
Beta Test /w Qwest and beta users	November 1 – November 15
Golden Master ("GM")	December 1
Product deployment	January 1, 2000

3. Technology and Business Overview:

The age of distributed network computing has finally arrived, and the mainstream computer user no longer needs to worry about software or hardware infrastructure. Through a thin client browser and across the Internet, mainstream business and consumer users will be able to tap into a large and complete network of services and infrastructure unattainable in the past. Many network technologies are converging, and LEADER is at the "cross-roads" of the new Network Computer revolution.

All applications built on the LEADER Network™ and the Application Network Infrastructure will be built around a complete business model that will allow LEADER to reach all targeted marketplace segments in the new distributed network computing paradigm. With a clear understanding of users, marketplaces, purchasers, market tiers and the future of network computing, LEADER will be able to build complete, whole product solutions. For a complete discussion of business concepts, please refer to the LEADER Business Plan (second edition).

Marketplace:

There are three market tiers of end-users and purchasers for the LEADER Network™ and LEADER applications:

1) Enterprise-level software, which requires scalable, and potentially transactional capabilities.
2) Business tier software, which includes mid sized and independent consulting agents.
3) Online users that encompasses small businesses and mainstream consumers.

LEADER'S marketplace goal is to reach out to each market segment with both its integrated LEADER Applications and Software suites and also the LEADER Network™. This includes targeting a wide variety of VARs, and third-party software and web-site developers. The LEADER Network™ will support a complete environment for developing, deploying and using fully integrated web applications. LEADER will use industry standard frameworks and software models to provide mobile code with resource and network location transparency. With LEADER'S Application Network, the mainstream user will finally be able to connect up to the complete network computer platform by the year 2002.

The "Complete" distributed computing network is described in figure 1. LEADER will be developing the Application Network, an integral layer and segment of the Network computing infrastructure. The Application Network is where users will access the computer software interface and application workflow that is driven by telecommunications and component technologies that deliver software and hardware computing transparently to the user via the Internet. LEADER'S unique human interface design allows target users and business and consumer suppliers to leverage specific workflow web applications and network technology services over a seamless and open software and network architecture.

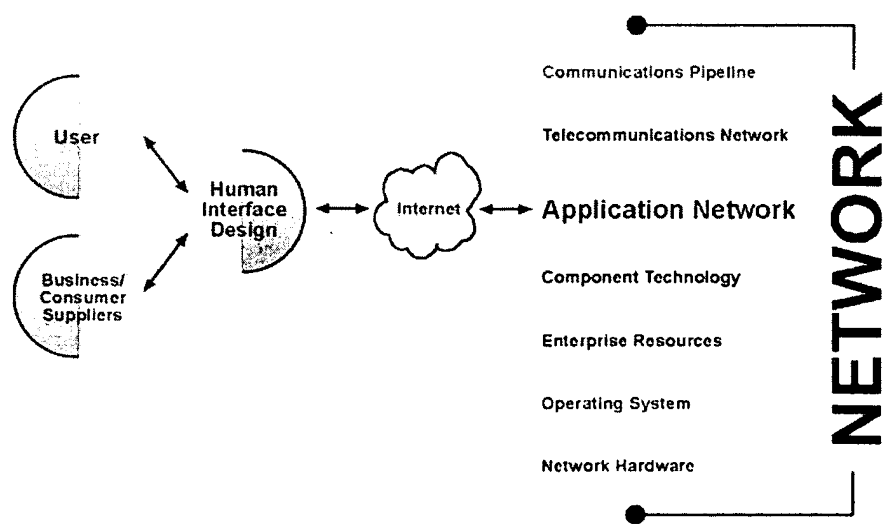

Figure 1

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The three network marketplaces LEADER is most concerned with are:

1) the TelApp market, which integrates telecommunications with web applications/networks
2) the ComApp market, which integrates component technologies with web applications/networks
3) the BizApp market, which targets business and consumer suppliers and their web software and sites to the LEADER application network.

The LEADER Network™ organizes these marketplaces and their technologies together. These three network marketplaces are the foundations for the targeted and transparent end-user experience of the Network computer world. LEADER Meeting™ and other LEADER collaboration software tools will help LEADER meet the needs of the TelApp market.

LEADER Network™ Architecture:

The LEADER Network™ consists of an Internet network of Hubs, Webs and Channels. Hubs are collections of inter-related LEADER Webs deployed over the Internet. Hubs are central gateways to collections of webs. LEADER.com will be central network location to launch into Hubs supported by LEADER. Webs are collections of data, web applications, channels and web pages. The distributed web applications on LEADER Webs™ deliver data to the end-user via dynamically created user interfaces. Communications between LEADER Webs™, Applications and users occurs in LEADER Channels™, which are workflow and multimedia rich interactive web places that are shippable and linkable anywhere a simple URL or web link can be embedded. LEADER applications are able to manage a large variety and range of workflow and knowledge management activities through user centric channel communications tools and environments.

LEADER Meeting™ is a distributed web application capable of creating a meeting channel across the entire LEADER Network™ and over the Internet (see figure 2; diagram A).

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LEADER NETWORK

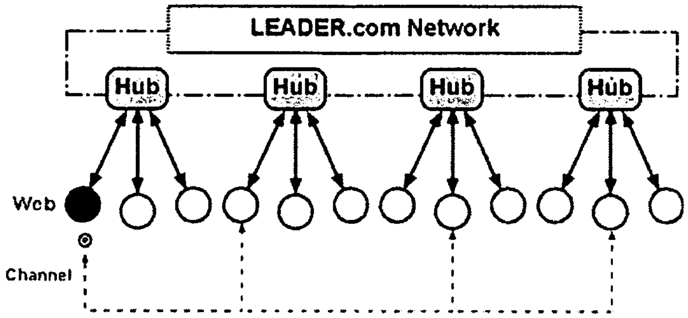

Diagram A

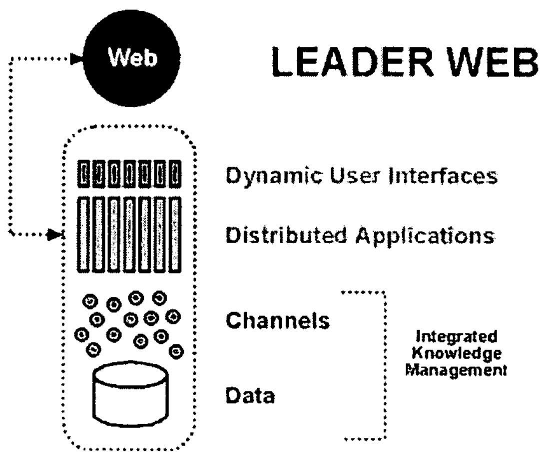

Diagram B

Figure 2

Versions:

LEADER Meeting™ will have three versions, each with slight variations of workflow depending on the target customer and user. These versions will be similar to other LEADER applications versions. LEADER'S goal is to develop multiple versions of the same product and product line for different marketplaces so that the optimal technology and business models may be achieved for each marketplace.

The first version of LEADER Meeting™ that will be developed by LEADER is the "Telco Version." The Telco Version will be targeted at Telephony services providers to give for free to end users of the LEADER Meeting™ software. Telcos will charge usage fees for collaboration features such as call conferencing initiated through LEADER Meeting™. LEADER Meeting™ will be co-branded with both LEADER and supporting Telco logos. Payment method for the Telco version will be a user account link to the Telco database. The user list and the LEADER Meeting™ application will reside at the Telco's database and web servers. Access control of the LEADER Meeting™ application itself will be handled by the software, and its own database that will also reside at the Telco web servers. LEADER will receive commissions from usage fees from the Telco.

In the LEADER.com Network Version, the telephony service provider will be LEADER. LEADER will provide services from a select Telco under a service agreement contract. LEADER will manage the LEADER.com web and services and handle user account and management at LEADER.com. Payment will be by credit card by the end user. LEADER will mark-up the telephony services and will negotiate lower mass-volume rates for telephony services.

In the LEADER Enterprise or Business versions, the purchaser of the LEADER web software will be able to administer and select from multiple telephony service providers marketed through the LEADER Network™. Payment will be by an account that will be opened with a select Telco by the enterprise. User lists and access controls will be handled by the company using the LEADER web software. LEADER will receive commissions from Telcos for companies using their services through the LEADER Web Software.

Specific version implementation will be designed during the engineering process and specifications development. All versions will be whole product, commercial-of-the-shelf type solutions.

3. Specifications:

3.1. Requirements for LEADER Meeting™:

Server Side: Java compatible web server capable of running Java Beans (Java Servlets)

Client Side: Internet Explorer 3.0.2+ or Netscape Navigator 3.0+

Java Version: JDK 1.15, JSDK

API(s): JavaBeans, Java Database Connectivity (JDBC), Java Shared Data Toolkit (JSDT), Java Telephony Application Programming Interface (JTAPI), JavaMail Extension,

Supporting Products: Qwest Telephony API (and various standard telephony APIs), PointPlus (Web enabled PowerPoint™ Viewer), 1 Cool Button (Java Applet Button toolkit).

Translation Software Components to be acquired.

Supporting LEADER Applications and Services: LEADER Web™

Browser Compatibilities:

LEADER Meeting™ will require users to have Internet Explorer 3.0.2+ or Netscape Navigator 3.0+. Some select features in LEADER Meeting™ will require 4.0 or greater versions in each respective browser. When a user lacks the correct version, help pages will be created to inform the user of where to download the newer components/software and an associated link.

LEADER Meeting™ Components:

Most LEADER software applications for the Web will use a combination of business objects and application services written in Java, and will implement either Java Beans or Enterprise Java Beans depending on the need of the customer. The entire application network platform utilizes Java Bean and Enterprise Java Beans technology throughout the application tier described in figure 3. By using Enterprise Java Beans, LEADER'S software application layer will be able to operate and take advantage of enterprise scalable resources through OTM's and other Enterprise middleware.

The application network will provide complete application, web, hub and other network services unparalleled on the marketplace today. LEADER application developers, third-party software developers and independent web sites will not need to write platform services such as telephony and unified messaging components. All of these platform components will be provided on the LEADER Network™ as full-featured, scalable services that will be mobile in code base and transparent in resource location. This allows all web applications written on the LEADER Network™ to inter-operate and inter-connect users and workflow without web application and site developers needing to manage or create these services independently. (See LEADER Network™ documentation for more information and detailed descriptions of business objects, application services, web services, hub services and network services).

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Business Objects: LEADER Business objects are web server application segments that communicate with an applet and/or HTML client and store information via a DBMS. Most application components in LEADER Meeting™ will be business objects. Business objects are designed around targeted business workflow for specific applications. Most business objects will have a default client interface.

Application Services: LEADER Application services are scalable application components that provide services such as access control list management. An API will be provided for LEADER business object writers to plug into the Application services provided by LEADER software platforms. Many LEADER applications use LEADER Network™ application services because they are designed to operate independently of business object workflow, and can scale in size with relative ease because of their Java Beans and Enterprise Java Beans interoperable software model.

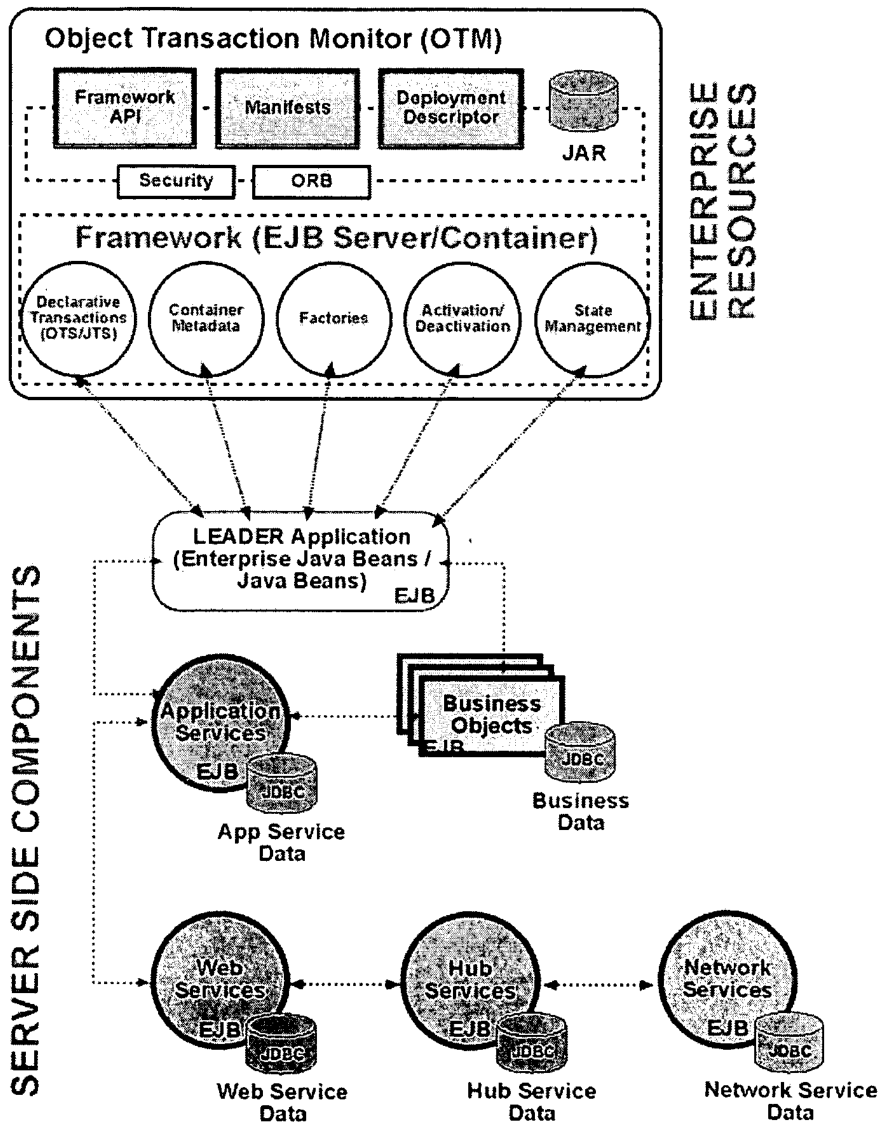

Figure 3

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LEADER Meeting™ Component Technologies:

Java Development Kit – The JDK is the core technology that supports all Java™ components in the LEADER Meeting™ application. The LEADER Meeting™ application will use a specific version of the JDK 2 tree (JDK 2 SDK Standard Edition v 1.2.2 is currently available). The LEADER Engineering Team and Quality Assurance teams will standardize on one version of the JDK family. The JDK is available at http://www.javasoft.com.

Java Servlets (Java Beans) – Java Servlets are applications written in Java that can be run on a Java enabled web server. A servlet can respond to both an HTTP Get and HTTP Post method. When a Get or Post method is sent to the servlet, the servlet processes the request and is capable of returning response HTML through a Java object.

Information from an HTTP posted form can be processed by the servlet. Java Servlets require the JSDK, available at **http://www.javasoft.com**. While some web servers provide built-in support for servlets, Microsoft IIS does not. ServletExec 2.0 from New Atlanta Communications, LLC, however, will provide support for the servlets in IIS. Demo copies as well as the full version are available at **http://www.newatlanta.com**.

Java Shared Data Toolkit – The JSDT is a toolkit from Sun Microsystems that allows developers to code applications that share data between users on different clients without having to deal with the low level networking protocols normally associated with this type of activity. The JSDT uses a client server model and gives the developer access to Sessions, Channels, ByteArrays and Tokens. Through these four mechanisms, the developer can control a wide variety of activities including data sharing, synchronization of file and data transfers, individual client control of an application resource, and data broadcasting.

JavaMail Extension– The JavaMail Extension allows a developer to interact with mail systems. The JavaMail Extension handles SMTP, POP3, and IMAP. The JavaBeans Active Framework is required in addition to the JavaMail Extension, and an additional extension is required for POP3 support as well. All 3 components are available from **http://www.javasoft.com**.

JDBC – The JDBC, or Java Database Connectivity Kit, consists of two parts. One is the JDBC API, which is provided with later versions of the JDK. The other component is the driver component. These are available at **http://www.javasoft.com**.

Button Applets – Various button applets will be required for navigation and other purposes with the application. 1 Cool Button Tool will create these applets. The software is available at **http://www.buttontool.com**.

PointPlus Java Viewer – The PointPlus Java Viewer displays Microsoft PowerPoint presentations. It is written in Java. This product comes in two parts. One is an applet that displays PointPlus Java presentation files (.jvs extension). The second portion is an MS Windows application that is referred to as the PointPlus Maker, which converts Microsoft PowerPoint files (.ppt extension) into PointPlus Java presentation files. Currently, PointPlus Maker requires user input to make the conversion.

The Engineering team will develop, with the viewer company, a solution so that LEADER Meeting™ end users will only need to upload an existing PowerPoint file. The conversion will be done on the server side. The PointPlus Java Viewer is available at **http://www.net-scene.com/java-site/jshow/index.html**.

File Upload Servlet – LEADER Meeting™ file uploading has two parts. One is on the browser side, and the other is on the server side. On the browser side, any browser that properly implements RFC 1867 will provide File Upload capabilities. Netscape 3.0 or greater and

Microsoft Explorer 3.0.2 implement RFC 1867 correctly. (Versions of MS Explorer before 4.0 require additional plug-in files from Microsoft to work correctly.)

Microsoft Site Server offers support for file uploading. For file uploading in Java, prototype code is available from Andy Madsen.

Translation Services – Currently, the LEADER Software Design Team is testing Systran software for language translation. The purpose of the translation service is to allow real-time translation of chat on the LEADER Meeting™ application. Translation software is still developmental, and is prone to common translation errors. The use of Systran's technology can be viewed at http://babelfish.altavista.digital.com, and the company's home page is http://www.systransoft.com. Also, an enterprise server and web application solution can be cound at **http://transparent.com.**

LEADER Meeting™ Application and the LEADER Meeting Channel™:

LEADER Meeting™ is a collaboration software application accessed from a browser and run on a remote Java enabled web server. It allows users to setup and coordinate meetings online. Once the meeting is defined and setup, a meeting channel is then created as a virtual collaboration meeting space.

The Meeting Channel™ is accessed through a web link or a specific URL generated by the LEADER Meeting™ application. The author or coordinator of a meeting creates a Meeting Channel™ by entering configuration information into the LEADER Meeting™ application. The Meeting Channel™ has a specific title and is a predefined channel for collaborative communications.

LEADER Meeting™ is similar to an application such as Microsoft Word, and the Meeting Channel™ is similar to a Microsoft Word document. The Meeting Channel is a collaborative workspace focused on the workflow of a generalized virtual Internet meeting. This collaborative workspace can be accessed and exchanged from application to application similar to a Microsoft Word Document. The URL can be embedded in documents, web pages, e-mails and other LEADER applications. LEADER Meeting™ allows the user to create a Meeting Channel™. LEADER Meeting™ is a whole product application that can be used in conjunction with the LEADER Office™ application suite or on its own.

Meeting Session:

A Meeting Session is defined as a meeting that begins upon a specified time (whether immediately or at some future date) and until either the last person leaves or the meeting is ended by the original host. The meeting session attributes are configured in the New Meeting Page. A specific meeting ID number is created for reference from the database and is also displayed for the user to write down if s/he wants to quickly find the meeting again via a meeting channel lookup ID.

LEADER Meeting™ Application:

Description: The goal of each LEADER Meeting™ page is to provide the functionality of a full-featured meeting and collaboration workspace with the fewest required user steps. LEADER Meeting™ is an application designed to drive Telephony conference services to the mainstream business and consumer users. By integrating a series of online collaboration tools with conference call telephony services, the user is empowered to conduct effective virtual online meetings. With the easy-to-use interfaces and well-organized and stable tools, LEADER Meeting™ creates a hassle free online collaboration environment that requires minimal software and hardware infrastructure investment by the user.

Users: The user of LEADER Meeting™ is the coordinator or author of a Meeting Channel™ where other participants of the meeting will meet. Participants of the Meeting Channel™ will not see LEADER Meeting™. Participants will only see the Meeting Channel™.

Draft

General Layout: LEADER Meeting™ has eight HTML web pages as its user interface. These pages are related to major features of LEADER Meeting™ and can be accessed from a navigation bar at the top of the page. A user can start a *New Meeting, Prepare Meeting, Join Meeting, Cancel* a Meeting, *Change* a Meeting, Manage a *People* list, change *My Settings* and *Exit* LEADER Meeting™. At the top of the page is a title bar that describes the application.

New Meeting Page: The New Meeting page contains information necessary in setting up a meeting. The "subject" form (see figure 4.1) will be used as the title and reference to the meeting from other applications and in messages and URL links. The "Reason" form (see figure 4.2) contains why the meeting was called, and is a text area box. The "Time," "Date" and "Duration" boxes (see figure 4.3) specify when and how long the meeting last. These boxes are given default values of the current time and date so that the default meeting starts immediately, and lasts approximately an hour as default.

The user gets to specify in a radio button form if this meeting is a public or a private meeting (see figure 4.4). Others can join a public meeting if it is listed or if an outside user knows the location and the general password (if specified in the Meeting Preparation section). A private meeting requires an invitation from the original host.

The invite people pull-down selection (see figure 4.6) will give a list of available people from the "My People" list of the host (an address book feature). If the host wants to manually enter a name and contact information or add a person from the system directory, there is a web link (see figure 4.7) to a page that will display all available users from a directory. On the same page is a manual dial-out entry form and a form to add new people to the list that are not listed in the system directory.

For hosts who want the channel to be a permanent or recurring meeting, they can click on a web link (see figure 4.8) that will allow them to store and automate multiple meetings with exceptions and inclusions. In the recurring meeting pages, the host can also create a Meeting Channel™ that is a permanent public/private channel.

There are also a few simple Meeting Channel™ configurations that a user needs to decide upon before a meeting will be scheduled (see figure 4.9). LEADER Meeting™ needs to know if the user will want the channel to automatically close after the last person leaves, if SSI encryption will be used for secure transmissions and if the Conference Call feature is used (since it is a paid feature, not all hosts will want to provide the feature in meetings).

After the form is filled out, a submit button is pressed by the user and a new meeting is setup and scheduled. If the user then wants to prepare materials and other logistics for the meeting, they will click on the "Prepare Meeting" page (figure 4.5).

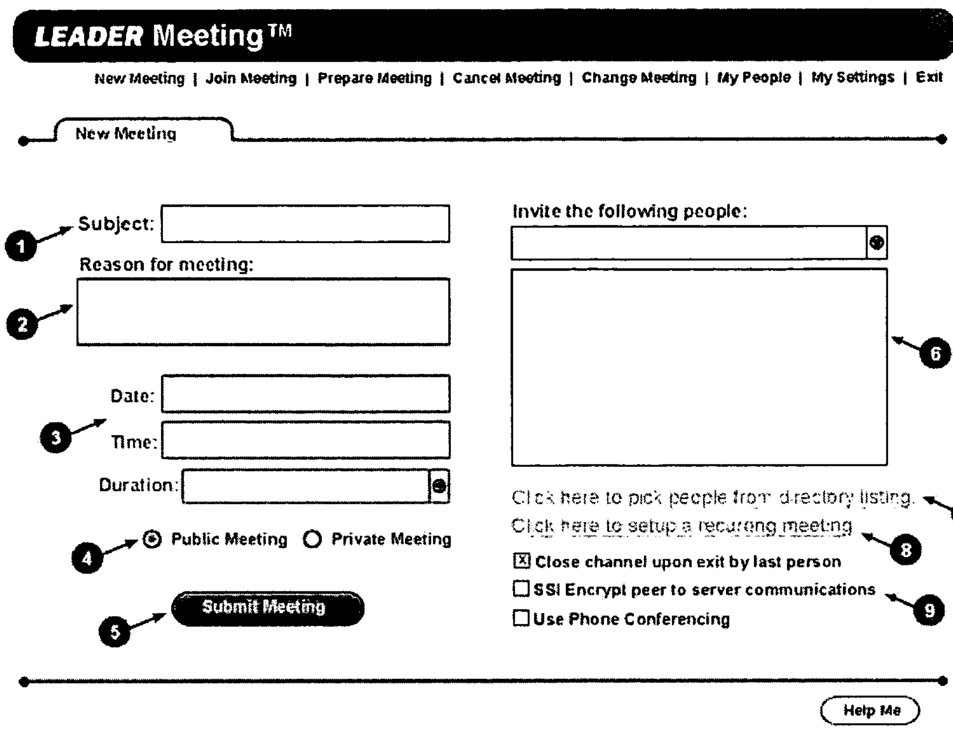


Figure 4

Join Meeting, Cancel Meeting and Change Meeting Pages: The Join Meeting, Cancel Meeting and Change Meeting pages employ a meeting list component (see figure 5.1) and an action button (see figure 5.2) depending on the function of the page. When the user selects the meeting and hits the action button in the Join Meeting page, they are taken to the meeting channel selected. Listed in the Join Meetings page are also saved meetings by the host. For the cancel meeting page, a confirmation page is shown to the user confirming the deletion of the meeting channel. For the change meeting page, the new meeting form is displayed and most of the form fields contain already setup meeting information.

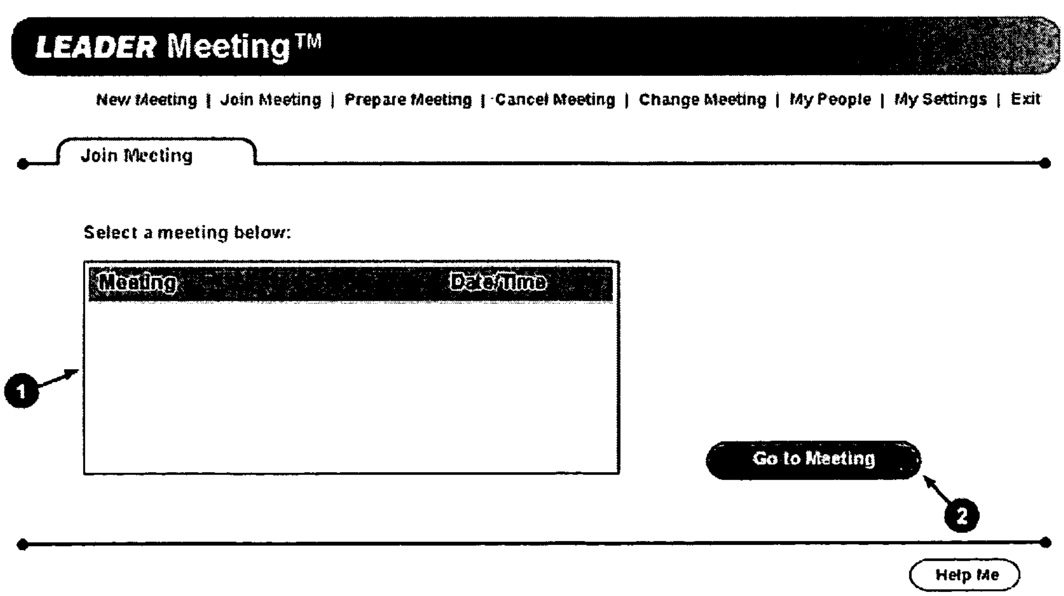


Figure 5

Prepare Meeting Page: The prepare meeting page lets the host write out invitations, invitation delivery method, upload hand-outs, define detailed logistics, send via e-mail pre-meeting reference materials and load previous saved meetings as templates for the new meeting.

My People Page: The people page contains components to allow for a directory search of people on-line to add to LEADER Meeting™ as address book entries. There is also a form to enter new people to put into the application "address book" that are not from the system directory.

My Settings Page: In other versions of the LEADER Meeting™ application, the settings page allows the host to select a telephony service that is available to them. The settings page allows the host to set default values for meetings, a list of plug-in and support links for the software, the host's online information, maximum number of meeting participants, default restrictions to the access control list, etc.

Exit Application Page: Confirms if the host wishes to leave the application and summarizes what the host has done this session.

Descriptive Error Web Page Messages: For every button command, Java™ applet, or Web page, a descriptive error page can be loaded in a separate window that describes an error when it occurs. Clicking a button on the error page also closes the window. Error messages will also include circumstances like incompatible browsers, cookies not turned on, etc. These error messages will be retrieve from the error message database and be displayed through the error message component.

<u>Meeting Channel:</u>

Description: The Meeting Channel™ is designed to be a full-featured collaborative environment designed to provide easy-to-use tools to conduct online virtual meetings. The channel can be an ad hoc channel, a scheduled channel, a recurring channel or a permanent channel for participants of a meeting to visit.

The channel can be listed in other LEADER applications and on web pages over the Internet via a simple Web link or URL address. Once initiated, a permanent channel ID is created by the meeting application as a reference to the meeting channel. This helps a user quickly find the meeting again.

Users: For the Meeting Channel™ there are two types of users, 1) hosts and 2) participants.

Hosts are able to manage the access list for the meeting and specify which tools participants are able to use. There may be more than one host, but only the original host ("main host") may affect the setup and configuration of the meeting.

The main host creates the Meeting Channel™ through the LEADER Meeting™ application. All other users are accessing the Meeting Channel™. Participants get the use of most of the collaboration tools, but will not see host features such as adding and removing participants. Participants will only see the Meeting Channel™ web page.

Registered participants are ones that are listed in the system or directory database. Unregistered participants can be manually entered by the host and invited to the meeting through the Add Person feature.

General Layout: The Meeting Channel™ consists of meeting description area, meeting management area, multi-lingual chat applet, note pad, projector and hand-outs basket.

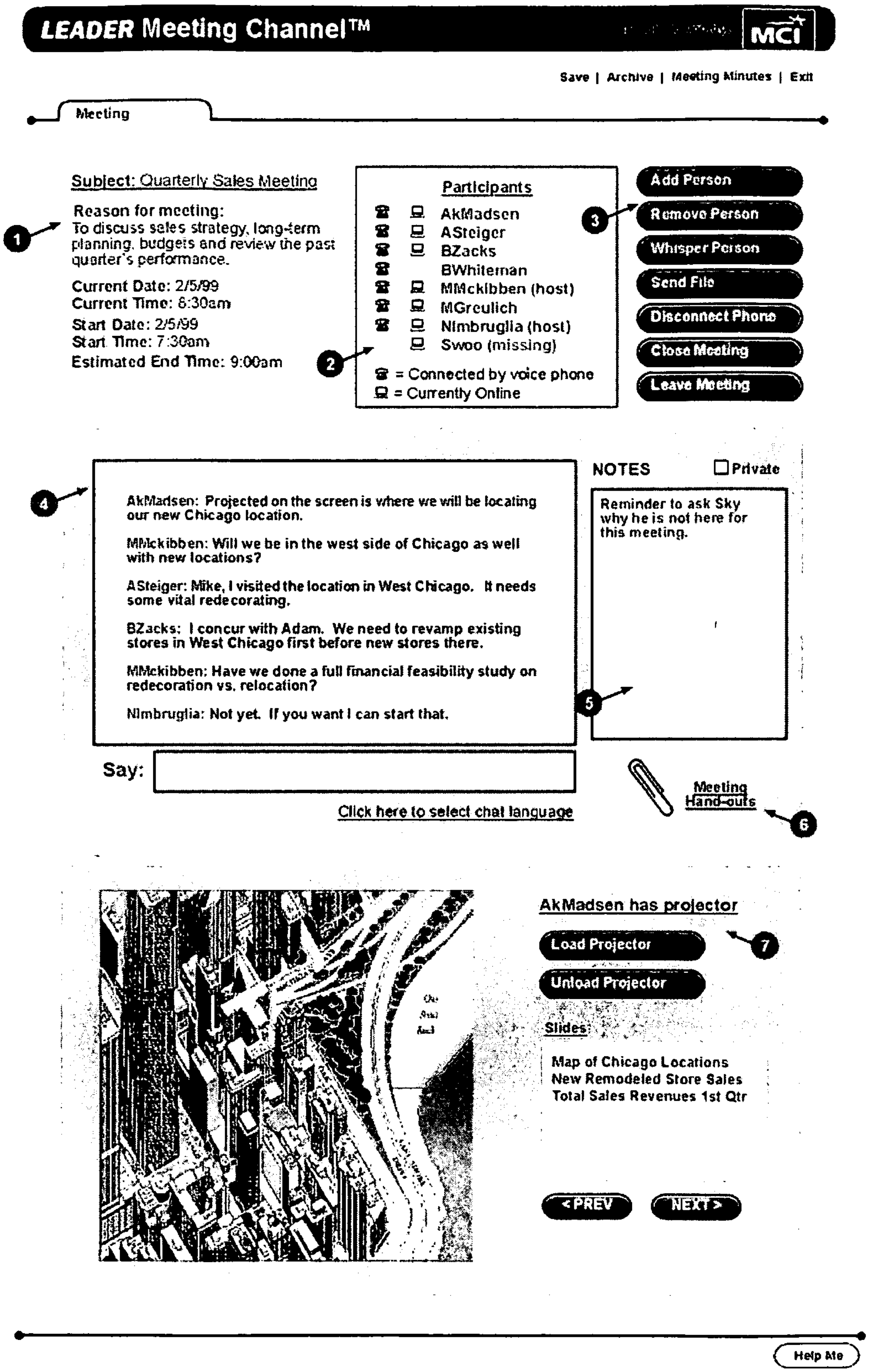


Figure 6

Meeting Description: The meeting description component (see figure 6.1) is a HTML/Java applet panel that displays "subject," "reason for meeting," "meeting start date/time," and "current

time/date" of the meeting. This information is previously entered by the user in the *"new meeting"* page of LEADER Meeting™. The date and time information cycles every minute. The date and time will display local time (as compared to the invitations that will show both host remote time and local time).

User Meeting List: The User Meeting List component (see figure 6.2) displays the meeting participants and shows if a participant is connected via conference call and/or online. Participants who are hosts are also indicated as hosts. Those invited to the meeting and are currently missing are indicated.

Meeting management tool: The meeting management tool (see figure 6.3) is an integrated Java™ applet that communicates with the LEADER Meeting™ web server application. All user meeting and calling activity, such as setup and call management monitoring is administered through this applet. The LEADER meeting web application communicates to an outside telephony connection service such as Qwest, AT&T or MCI.

There are three primary sets of functions handled by the meeting management tool: 1) automated and manual call conferencing administration features 2) host activity administration and 3) participant meeting features.

Automated conference calling occurs during meeting initiation. Each participant (including the host) receives a phone call from the service provider at the specified date and time. The call occurs whether or not they are logged onto the Meeting Channel™. Java™ classes are invoked by the LEADER meeting web server application that send pertinent information to the Internet server, via a Telco's Web API or an equivalent Internet URL connection provided by the Telco.

There are three primary ways a user can connect via the call conferencing features of the LEADER meeting application. First, by being invited to the meeting. During the meeting setup process (described in *"meeting setup"*), the host will add meeting participants into a list of invitees. The second method is by setting up the meeting. The host of the meeting is automatically put onto the conference calling dial-up list as the first person contacted by the conference call center. The third is by manual dial-up, either through the *"new meeting"* page in LEADER Meeting™ or during a meeting session through the LEADER call conferencing features on the Meeting Channel™.

The host can request a manual dial-out or pick from a list of users in the system or company directory at anytime during the meeting session. The call conferencing feature gives meeting participants the opportunity to join the meeting without using a web browser.

Hanging up the phone will automatically log the user out of the conference call, but they will still have an active meeting session.

There is a timed-out meeting feature that asks the user if they still want to be in the meeting if they do not respond with any activity over some system specified interval. If the user does not respond to the timed-out question, the user is then logged out of the meeting. If the user is interrupted from the meeting and is not manually logged out, their transcripts and notes of the meeting are stored for the user in a temporary location.

There are several command buttons available to the host and participants of the meeting. Hosts have specific call conference and meeting administration buttons to manage the meeting. In addition to these host functions, the hosts also have all command buttons supplied to participants.

Host Meeting Tools: Hosts can *"Add"* and *"Remove"* a person (see figure 6.3) to and from the meeting and conference call. Adding a participant will pop up a dialog box requesting information about adding a participant from a user directory through user browsing or the ability run a quick search for the participant. The host may also manually add a person with a phone number or e-

mail address to get them onto a conference call even without the user being listed in the system directories or in the hosts "My People" list.

Removing a person will automatically disconnect their conference call and remove them from the participant list. Once removed, then can only be invited back in by adding them to the list. In cases when the meeting is run as a public meeting, the host will also have the ability to *"Ban"* any user from the meeting.

The original or main host may also *"Close"* an entire meeting. The application checks to see if the user is the main host before offering the button to the client applet. A dialog box will pop up requesting confirmation for meeting closure and will explain what the application will do. Closing an entire meeting will log everyone off and disconnect all phones.

Participants in a meeting are listed in an applet that lists all participants and hosts, and their current meeting status such as being online, connected by phone and if they are a host or regular meeting participant. All hosts are also participants and have user meeting tools as well.

User Meeting Tools: Participants may *"Whisper"* to another participant. This allows them to send a private message to another person. The private message is also listed in the conference board, but is labeled and colored differently to indicate that it is a private message. *"Paging"* a participant sends a beep and a message to another participant's client browser, and also requests a beep to sound via the Qwest conference call connection at the same moment. Participants may also *"Send"* a file to another user, *"Leave"* the meeting or *"Disconnect"* from only the conference call.

Many of these buttons will open a small Java™ applet dialog box requesting information and describing the information requested. The information will be sent back to the server side application and stored in the database.

Chat Applet: A chat application is run on the web server, which supports a Java™ applet client (see figure 6.4) on the user side of the session. This is a simple chat applet that can display multicolored text and graphics images. It is very simple to use and requires the user to basically type in his message in the *"Say"* form and press return to submit it. The message then appears on all screens in sequence next to the author of the message. The chat applet screen scrolls when full and the user may scroll back to see old conference board messages. The Chat Applet will be designed using the JSDT.

The user may also select their language and the Chat Server will translate different languages as if the Chat applet was an universal translator.

Note Pad: The Note Pad (see figure 6.5) is a form that a meeting participant fills in and stores text similar to a message pad. The text message note goes into the meeting minutes when finished.

Projector: The LEADER Projector™ (see figure 6.7) is a simple to use presentation projector that shows presentation slides to all participants simultaneously and controlled by an owner of the projector. The projector will use the token/listener features of the JSDT. When no one has the projector, each participant or host may grab the projector for use. When a participant or host uses the projector, no one else may use the projector. The participant may return the projector.

The projector allows the participant to presentation files for display. These files can be: HTML, graphics files (i.e. jpeg, gif, .bmp, .tif), voice files (i.e. .wav, .au) multimedia files (i.e. .avi, .mov, RealPlayer™, .mpeg) or Microsoft PowerPoint™ presentation files.

With PowerPoint™ files and multimedia files, applet plug-in controls will be available to control the slide show inside a Microsoft Explorer Iframe or Netscape Navigator Frames. If these features are not available in the browser version, then a new browser window will be created.

Clicking on the file in the slide list will jump the projection show to the clicked on file. Clicking the *"Prev"* and *"Next"* buttons will advance the next slide or retrieve the previous slide. Any participant can detach the projector to fit in its own window.

Hot Pointer and Annotations: The hot pointer is an applet tool that maps to the presentation screen and allows each participant of the meeting to click on a point on the screen and a corresponding symbol and name will appear on the other browsers much like a common laser pointer. If the participant double clicks on a spot, he or she will see an applet window that will allow them to add an annotation that will be mapped and stored in the database and displayed on all browsers.

Send Files: The *"Send Files"* button allows a participant to send one or more files to one or more meeting participants. A user selects in the meeting participant list all people the user wants to send a file to and an applet dialog box pops up. The user then selects what file(s) from their hard drive they want to upload. Alternatively, if the browser is incapable of doing this, a new browser window pops up where a file name can be typed in with the location of the file(s). Once submitted, the files will be sent to the server and then sent to each specified participant. The participant receiving the file will be asked where the file(s) should be stored and will have a chance to rename the file(s).

Hand-out Basket: The Hand-out Basket (see figure 6.6) is a general purpose container for any file that participants or hosts want to make available for retrieval from the basket. Each participant is able to download files from this basket. Before a meeting, the host may prepare a meeting by uploading hand-outs to the basket.

Usually, meeting participants will drop off pertinent meeting backgrounder or interesting information in this basket. The Hand-outs Basket is simply a button and text hyperlink to a new browser window that pops up with a list of files and the ability for a person to retrieve, read or add to the basket. Only the host may remove an item from the basket once submitted. If possible, the document or file will be displayed in the new browser window. The Hand-out Basket can be closed at any time.

Save Meeting: The host can save a meeting to be loaded later as a template for a new meeting or save the entire meeting contents for later reference.

Meeting Minutes: This tab will allow users the ability to store and summarize their own meeting notes, and place their notes for the general use of the meeting participants if so desired. The Meeting Summary will have statistics and reports on the meeting and transcripts of the conference board for reference and storage. The user can download this or have it e-mailed to them as an entire transcript package similar to meeting minutes.

LEADER Phone™ Specification

The LEADER Phone™ application is a part of the LEADER Meeting Channel™ Application. It is intended to allow a customer to call another person or persons, by selecting or entering their phone number via a Browser interface on a LEADER TECHNOLOGIES Web site.

The idea is that a user would go to the LEADER TECHNOLOGIES Web site to use the LEADER Phone™ Web application, log in and then have the ability to call one or more people. The Web page would have an interface with a telephone system. The call initiator would enter the phone number(s) they would like to call and then tell the system to initiate the call. The phone system would then call all the parties listed on the call.

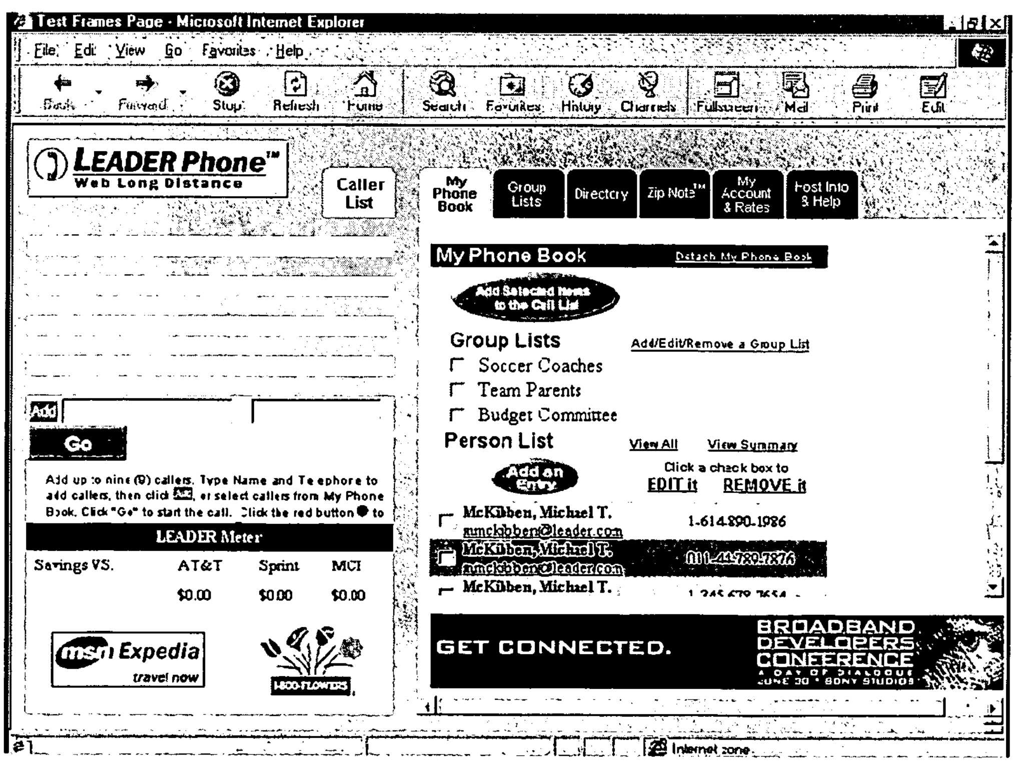
Specific functionality of the application:

- Having a personal address book
- Calling one person
- Calling a group of people at the same time (a conference call)
- Scheduling a call
- Having a list of users you would call just by selecting the group
- Zip Note™

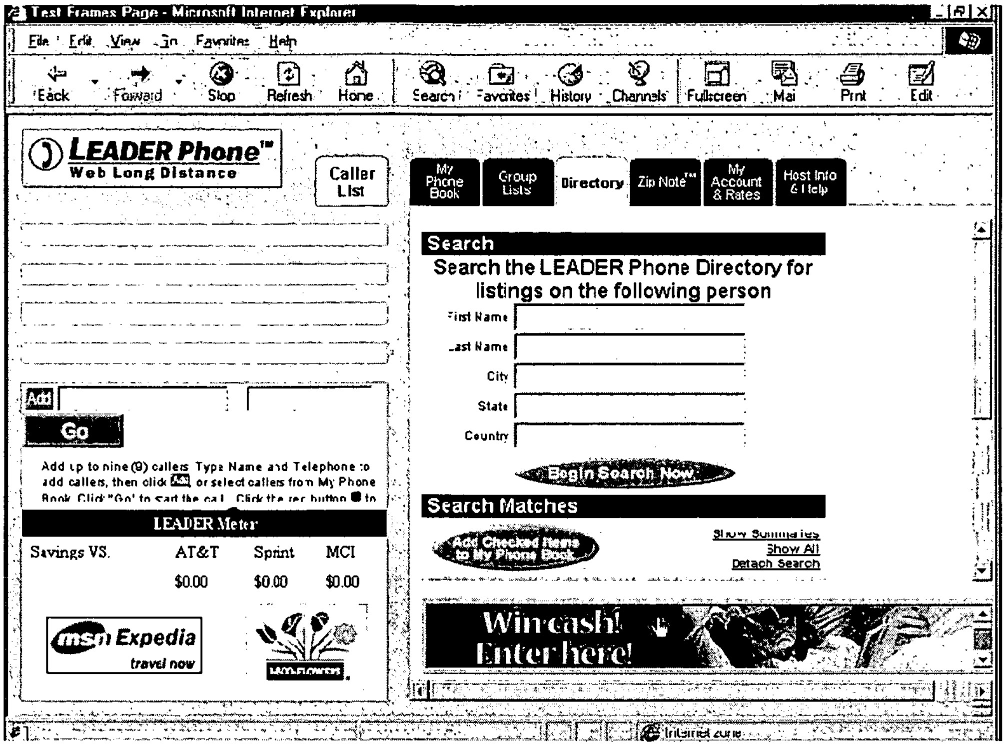
The following sections describe the functionality of each of these items.

Having a personal address book

A user would have a list of people they would call on a regular basis. This could be business associates, relatives, friends, or other people you would call on a regular basis. The concept is similar to a personal address book in e-mail. This way, a customer will not have to enter a persons phone number every time they would like to place a call, but rather just select a name from their phone book, and then place that call. It could also be thought of as speed dialing. In order to enter someone into the personal address book a customer would either select the person to call from a list of other customers of the system or they would enter that person themselves. When the system is new and the number of customers of the system is relatively small, most of the people called will be entered by the

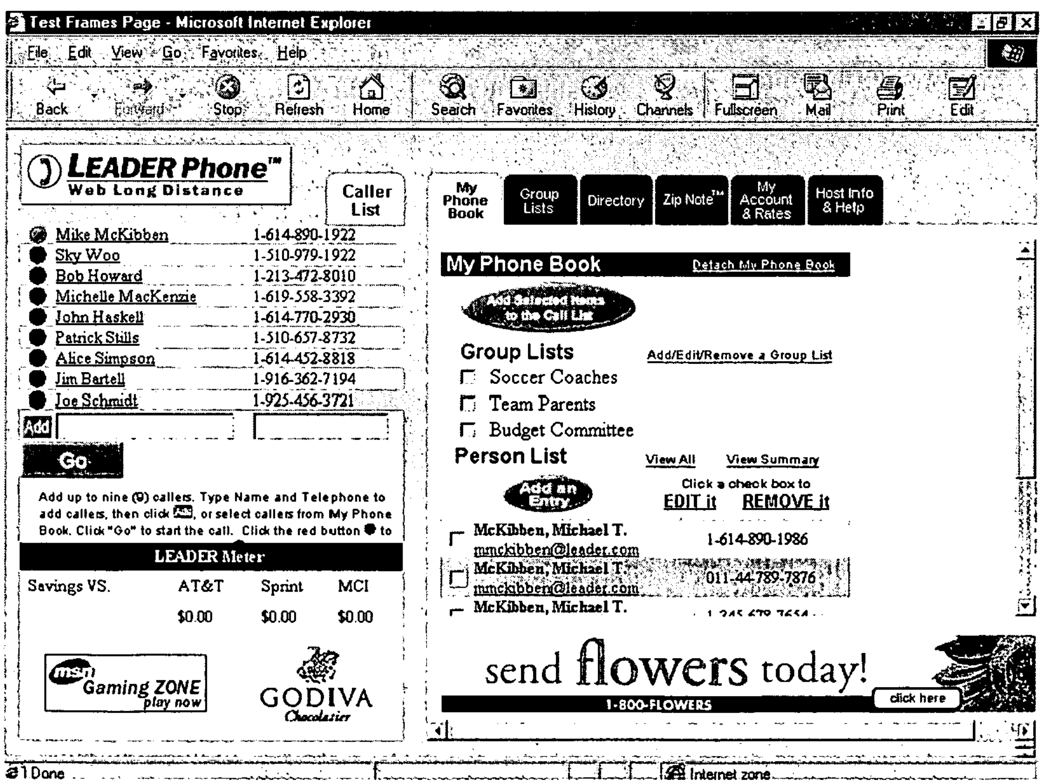


calling person. The person will only have to enter enough information into the personal address book to place the call to this person. The customer will only have to enter the information one time, and then it would be stored in their personal address book.

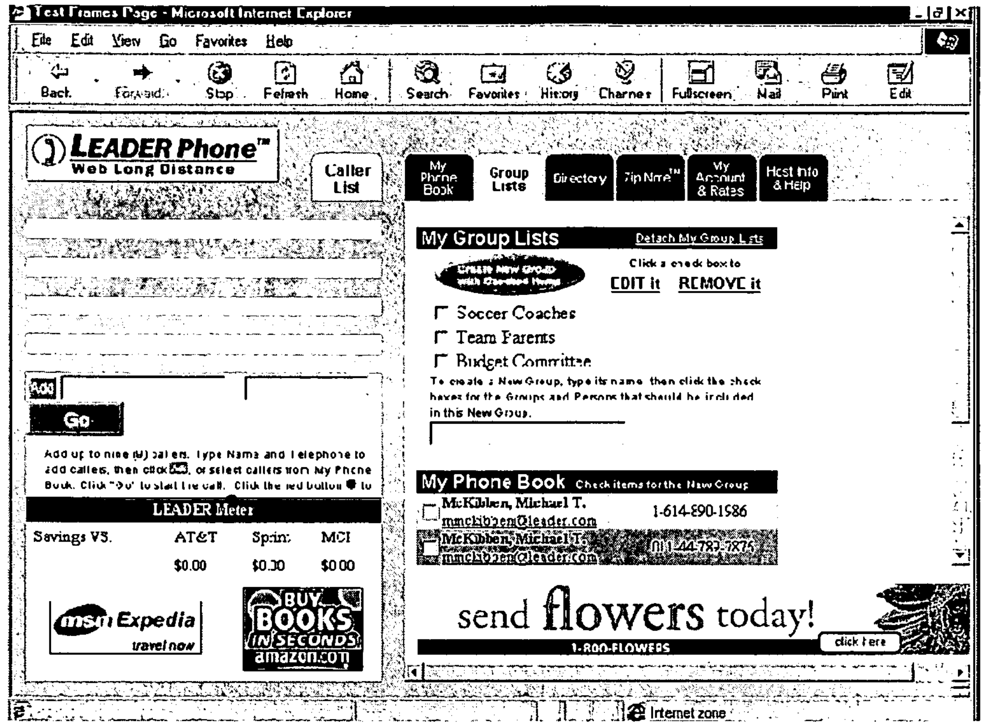


Calling one person

This is the core functionality. A person would be able to call another person via a web interface. A person's phone number will either be selected or entered in the calling list. Then that person or persons would be called. The call is accomplished by calling both the call initiator and the call recipient. The call initiator would have to remain on line while the call is in progress so this person would need to have Internet access other than their primary phone line. If they had two phone lines, the person would have the system call them on their primary phone number and then call the other person on persons on the call. When the system calls the call initiator, they will be prompted to enter a greeting for the call. When the other person is called, the greeting will be played for them, and then they will be connected to the call. The initiator would stay on line and every few minutes would be asked to respond to a popup button asking is they want to stay on line or at least to acknowledge that they still are at their terminal and responding to the phone messages. If they do not respond within a minute, they will



be disconnected from the call. This functionality would interact with the personal address book by allowing the customer to select a person to call from their personal address book and then pressing the call button to initiate the call. If the person to be called is not already a customer or is not in a persons personal address book, the phone number can be entered and the call initiated from this number.



Calling a group of people (a conference call)

This functionality allows for creating and having a conference call with multiple people on the call. The idea being that there would be a greater benefit to be able to talk to a group of people at the same time and place that call via the web. So a customer could either select a group of people to call, or enter them, and then press the call button. This functionally would work the same as calling an individual person. The person initiating the call would be called first, and then the other persons on the call would be called in sequence until all the participants are on the call together. The call initiator would again be prompted to record a greeting for all the other participants in the call. When they are called they would first hear the greeting, and then they will be connected to the call. The initiator would have to have to phone lines still and they would have to remain on line to respond to messages on the LEADER Phone™ screen. They would again have one minute to respond to a message or their call will be terminated.

If, when a person in the group is called and they do not answer, the initiator of the call will have the option to drop them from the call without having to listen to an answering machine recording. The LEADER Phone™ screen would have a button for dropping a person from a call if they have to hang up or if they do not answer.

Scheduling a call

Scheduling a call is similar to having a call, only it is being done in advance. In this case, the user would enter the people they would like to have on the call, and then select when they would like the call to take place. The call would occur just like with a normal call only it will happen at a prescheduled time and not while the person is pressing the go button. A scheduled call could either be an individual call or a conference call with multiple people on the line.

Note: It is not clear yet, how we will get the advertising to occur.

Having a list of users you would call just by selecting the group

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A customer will have the ability to call more than one person by selecting a group to call. So, if that person belongs to a group and they would like to call them all at the same time without having to enter each persons name individually, the customer will be able to enter of select a group of users to call.

A possible additional use for this functionality will be to call a group of people with just a message. When the call initiator is prompted for a greeting, they could just record a message and then hang up. They system would then call all the other people in the group playing the message for them.

Note: It is not clear what would happen if the call encounters an answering machine.

Zip Note™

A Zip Note provides the ability to the customer on line of writing a quick e-mail message. The customer will be able to select an e-mail address from their personal address book or create a new e-mail address. Then they could write a message and send the message while they are on the phone call. The user's e-mail address will be automatically selected from the database of the customer for their message.

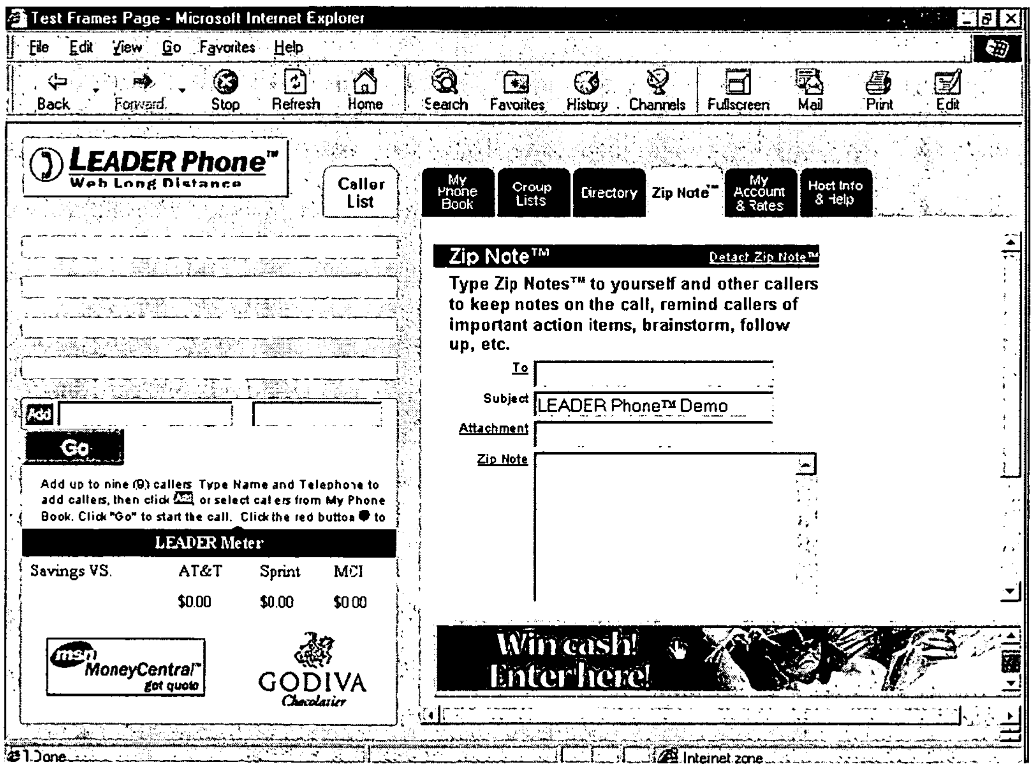


EXHIBIT E

created on or before October 4, 1999

Web based email client Responsible for sending and receiving email

Needed for demo
- Type in recipient
- Type in email message
- Type in subject
- Select an attachment
- Before, as, or after message is sent, hand off email text and any attached files to file converter (we won't even have to parse the email then. They will already be separate)
- Put together the email and attachments
- Send the email

Want for demo version
- Address book (can we use the address book from the phone side?)
- Login that tracks who the user is so we can set reply-to address
- Deal with comma separated list of recipients
- Select multiple attachments
- File naming convention. /cache/timestamp.<username>.<fullpath on client machine with spaces changed to _ >.<filename>.doc

Desired at some point
- Check email
  - file email
  - reply to email
  - quote original message
  - forward email
  - print email
  - delete email
- Email Lists
- CC, BCC, multiple independent emails
- Configuration interface to put in user name, email address, etc

Bells and Whistles
- Spell checker
- Fill in email as user types
- display html email correctly
- most frequently used section of address book
- write html email
- keyboard integration (hot keys)
- Client side email arrival notification
- Application configuration and storage from client interface.
- Alter appearance of email for attachments once file is selected for attaching
- Delete/manipulate attachments

File format converter Responsible for trying to convert files into text (possibly HTML)

Needed for demo:
- Periodically scan certain directory for new files
- Convert a word file into a stream of ASCII text
- Pass ASCII to database indicter
-

Wanted for demo:
- Put file after scanning in a central location
- Pass file location to database at time of index

- Excel to text function
- Powerpoint to text function (I wonder if we can do this with a simple program that replaces everything that isn't an ascii character with a space. It would have a lot of garbage, would cause our index to be bigger than it needs to be, but the words in the file would also appear in the output stream (hopefully) and would get indexed. This might be a good default behavior for files in unknown formats.)
- File naming convention. /cache/timestamp.<username>.<fullpath on client machine with spaces changed to _ >.<filename>.doc
- Converter naming convention: /converter/<extension>.1 /converter/<extension>.2 /converter/default

Desired at some point
- Clean converter for as many different file formats as possible
- Software package that someone is keeping up with on a constant basis

Bells and whistles
- Pull out title of document, first paragraph to put into database for display as part of the search results.

Search engine indexer Takes text from converter and text in email, indexes and places in database

Needed for demo:
- Take stream of ASCII text and filename
- Write single words with filename to database

Wanted for demo:
- Write 2, 3 and 4 word phrases to index
- Take file location and write to database

Desired at some point:
- Tune and performance analysis
- Remove common single words and phrases (and, a, of, etc)

Bells and whistles:
- Take additional metadata (author, title, first paragraph, etc) and write to database

Database Repository for index information

Needed for demo:
- Table of two columns: word, filename
- Query "select filename from tablename where word = 'search word'"
- Insert "insert into tablename values (columnname, search word)"
-

Wanted for demo:
- Table to be indexed
- Take phrases
- Additional column file_location in addition to filename

Desired at some point:
- Columns for author, time, recipient, etc (supports searching better)
- Column for hit count in doc, doc length, first occurrence location (supports ordering results)

Bells and whistles:

- Column for related documents
- Column for times accessed (support ordering)

Web Search Engine of index database Searches information in database and presents results to user

Needed for demo:
- single text field
- single button searches database
- List of links returned

Wanted for demo (some of these I've included because they are already written):
- Link returns to file locations
- Refining search
- Links for pages of hits
- Different meta-data type search (search on full text or search on author, etc. If other parts of the project only get their needed issues done, this might have to be a single type, but the infrastructure can still exist)

Desired at some point:
- Eliminating search (not this type of thing)
- Phrase search 2-4 words (ie "This is a test")
- Author list search
- Time choice search (Today, yesterday, day before, sometime this week, last week, this month, last month, 3 months, 6 months, this year, etc)
- Ordering by some method other than random
- Display title, author, date, first paragraph etc as part of what is returned
- Search based on transactions or based on files or both at user's request.

Bells and whistles:
- Customizable search engine returns
- Pick start and stop point for times
- Standard search engine coding (+, - parentheses, etc)
- Ability to email/fax/call author of returned result
- User configurable ordering of returns
- User configurable amount and type of data returned
- Provide ability to see documents online

EXHIBIT F

created on or before November 5, 1999

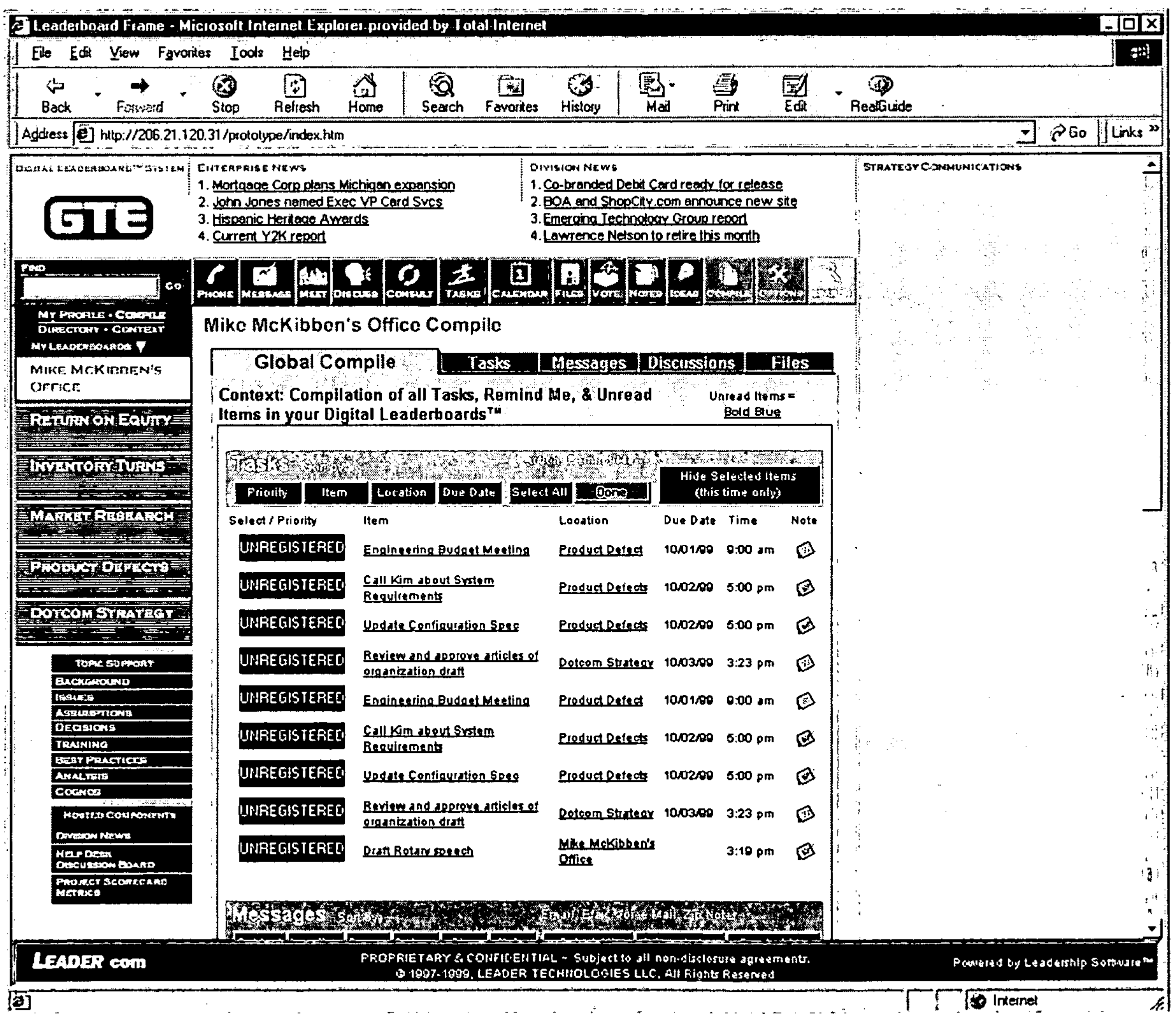
1. Compiling New Information

There will be two types of compiles. One is if a person is on a board, and they select compile, they will be presented with all the new information on the board. The other option would be to select a global compile from the global tool options, and this would present the user with a list of all the new items on Leaderboards that a person has access to. The global tools are located in the blue area of the screen where the global search, context, and profile information is located.

The compile option would contain the following pieces of information:

Agenda Items	Meetings and tasks
Messages	Universal Inbox information
Files	Binary Files
Discussions	Discussion Board information
Votes	Questionnaires or votes

The screen would look something like the following:



The idea of this feature is to place all new information for a person in front of them in one screen. This way the person can quickly see all the items that the system has for them, and they can prioritize that work accordingly. This screen introduces 2 new labels for functionality that currently exists in the system. The acknowledge button allows a user to change the status of an item from new to

acknowledged without falsely saying the item has been read. This allows the information to be removed from the users compile screen without actually forcing a person to read everything in the system.

Acknowledging something removes it from new status. So that item will never again appear in a compile screen. If a person wished to quickly change the status of all of a particular type of item, for example files, they could press the Select All button in the files box and all the Files would be checked. Then if the user selected acknowledge, the status for all the files would be changed.

The check boxes beside each option allow the user to select or unselect the specific items they would like to perform one of the specified actions. It would be possible for a person to press the select all button, and then unselect certain items, by unchecking the boxes next to those items.

The create reminder button creates an entry in a person's task list. The task would specify to perform whatever item was selected for reminder. So, if a person selected a discussion item titled "Engineering Procedures", and then pressed create reminder, they would be taken to the create a new task function and they would create a task with the default being to Read: Discussion Engineering Procedures. By creating a reminder for something, the item status is changed from New to acknowledged, and an entry is put in the Task list.

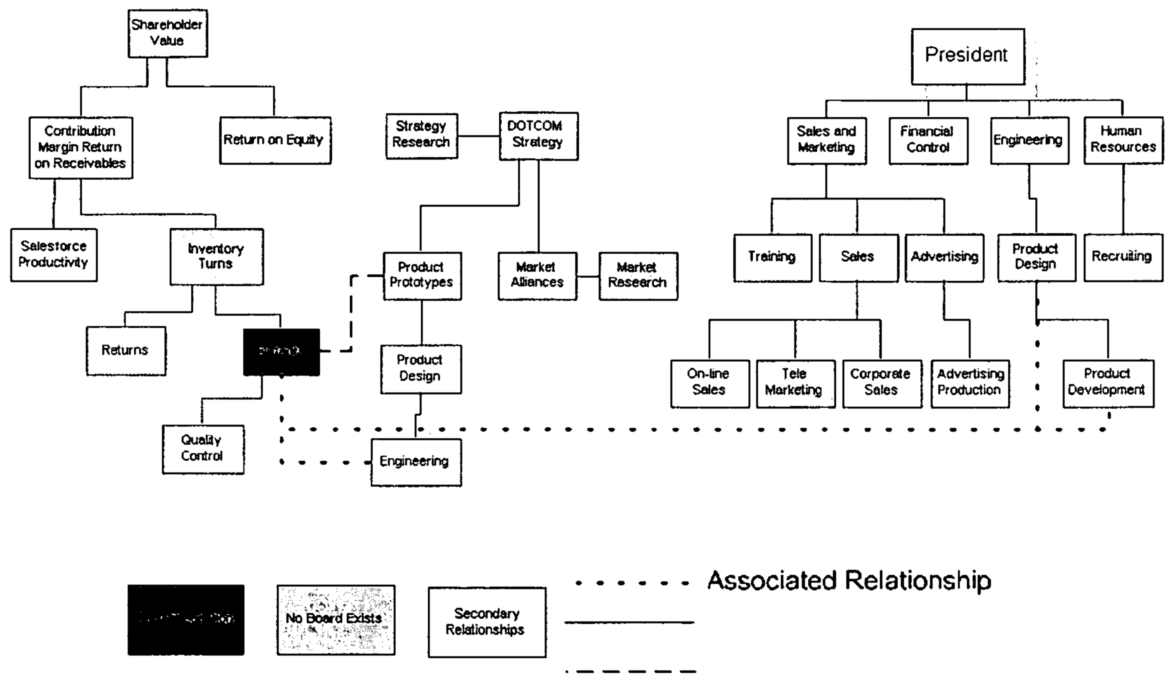
If an item is selected, the user will be taken to the appropriate location for that information. So, if a person selects a file on a particular Leaderboard Topic, they will be taken to that board and topic with the files toolbar option selected. The status of that item will be changed from new to read.

If an item is left untouched, its status will not change and it will still be displayed on the list.

The reasoning for having this functionality and handling it in this particular way, is to present a person with all new information either on a particular board, or globally on any board they have access to. Creating this screen could present an overwhelming amount of information for a person, so it is necessary to reduce the items on the list to only the most important ones as quickly as possible. The process of narrowing down the list of new items to only those that are most important to an individual person is best left to that individual person, so the best we can expect to produce is a set of tools which will facilitate this process.

2. Context Diagram

The purpose of this functionality is to allow a user with a single click to be able to see the context for their work within the whole organization. It would not only show how the person fit in organizationally but also in terms of strategic drivers for the company and workflow. The context diagram would show the current location for a user, the primary relationships for them on the board, the secondary relationships, and the associated relationships. In other words the diagram would put the work a person is doing into the context of the overall company.



Context Relationships September 25, 1999

Leaderboard version 1.0

Companies are obviously dynamic and no two companies are structured exactly alike. So to capture the data necessary to create this diagram, we will need to have a flexible structure. This structure will have to be capable of keeping the information about every Leaderboard, and the structure of the company, to include whether there are Leaderboards or not, the workflow of the company, and then the strategic drivers of the company. It will also have to maintain the relationships between each of these particular elements.

Context Diagrams will be built in a batch mode rather than trying to create them whenever they are requested. The diagrams will be stored in the database in the Web Board table. Each Web Board will have a unique context diagram. These diagrams will be created off line so as not to put too much of a delay on the responses.

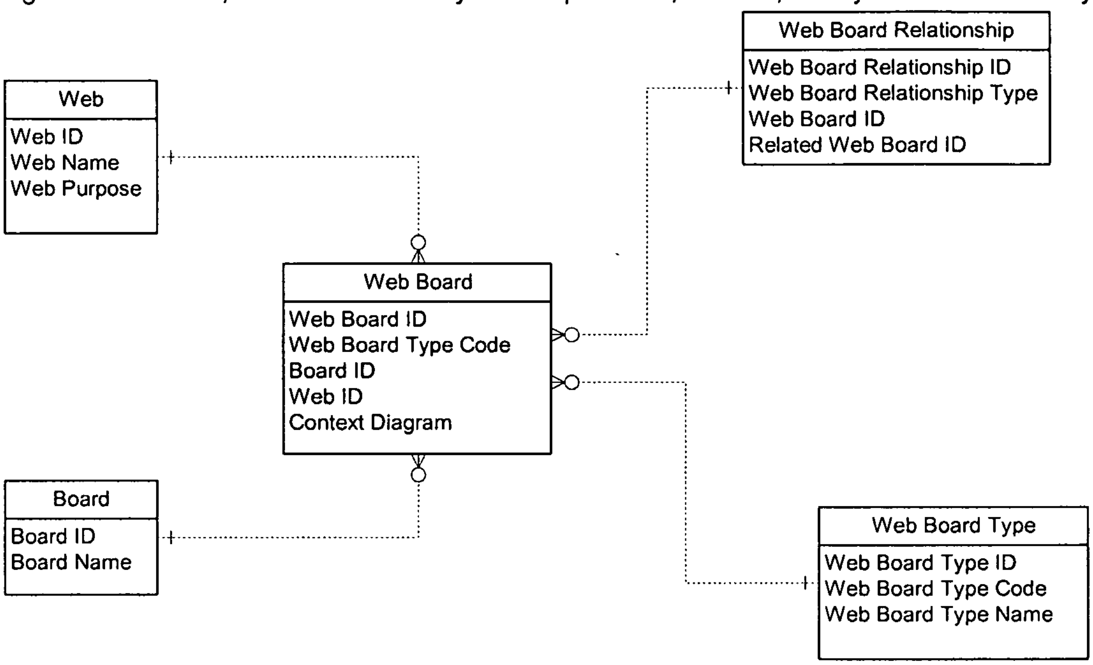
Web Board Relationships

A Leaderboard Web is a grouping of Leaderboards into some set of relationships. It is this set of relationships that will be used to create the context for a person. A single Leaderboard may belong to any number of different webs or it may not be in a web at all. A web can signify the company

organization structure or it could signify the workflow for a company or it could represent the strategic drivers for a company.

The relationships between the Leaderboards will be captured in the Web Board Relationships table. This table will contain information on how each node (or Leaderboard) relates to another node. Types of relationships are parent, child, secondary, or tertiary. Any relationship between nodes will be maintained in this table. It will be possible to expand the information in the table in the future if an organization wishes to capture relationships in a slightly different way. This information will be used for building the context display for a Leaderboard, and it will probably also be used to support some queries in the system.

The table Web Board type is to identify what type of web board it is. For example, in an organizational web, the web board may be a department, division, or any number of other types of

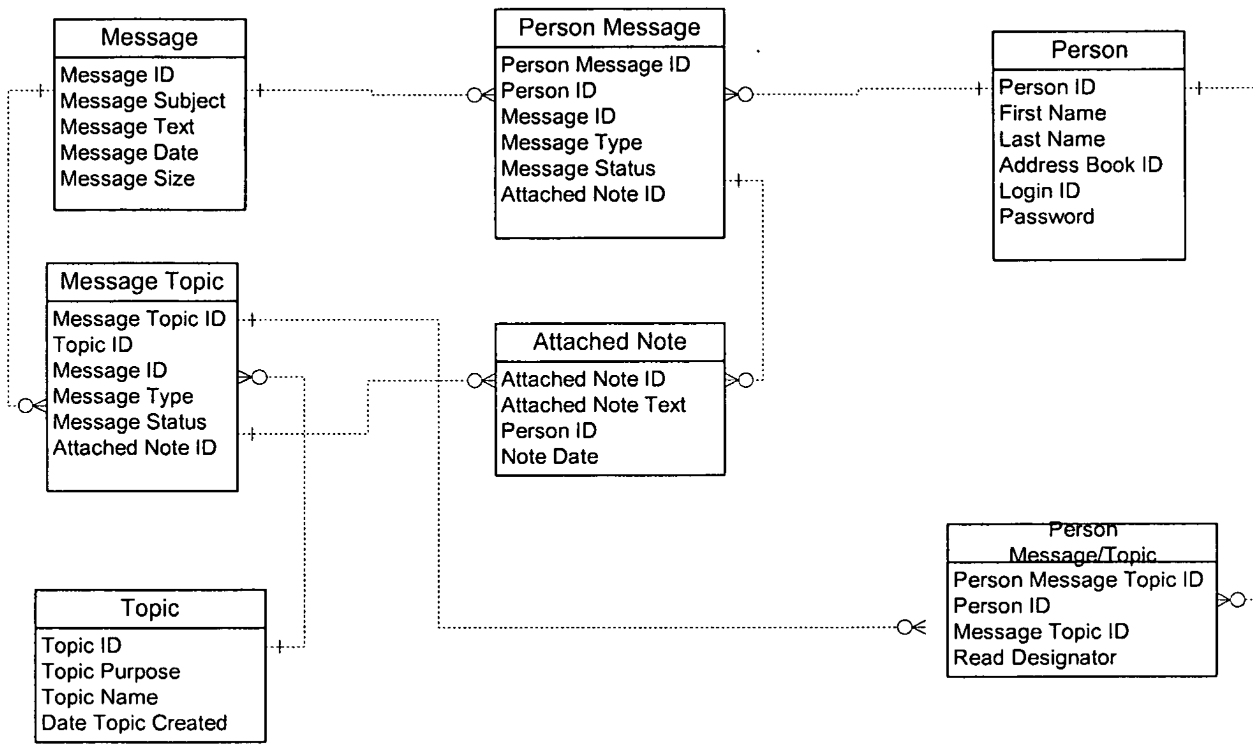


distinctions. This table will have the types of boards identified. The board type code will be stored in the Web Board table, and the types will be identified in the Web Board Type.

3. Universal Messaging

These are some thoughts on how universal messaging should be handled in the Leaderboard system.

One of the primary concepts is to keep the redundant message storage to a minimum, so what we can do is use the Person Message table to hold the relationships between a message and a person. In other words, if a message were sent from one person in the system to 7 other people in the system, it would only have one entry in the message table, but would have 8 entries in the Person message table. One would be the item marked sent, and the other 7 would be the entries marked received.



Possible types of messages:	
Sent	Message was sent by the person referenced in Person ID
Received	Message was received by the person referenced in Person ID
Forwarded	The person referenced in Person ID forwarded message. This would require that another entry already existed for this message and person denoting received by this person
Replied	The person reference in Person ID replied to message. This would require that another entry already existed for this message and person denoting received by this person

A message could also be designated as deleted for purposes of a user display. In other words, if a message is received, and it is forwarded to 6 other people, and then the person decided they did not want to keep displaying the references to the forwarded messages, they could be "deleted" or removed from the display.

A person could attach a note to any message they were authorized to read. If a person was on a Leaderboard, and they read a message and wanted to attach a note to that message, they would be able to do that with the attach message feature. It would operate similar to a sticky note, where any sort of additional information about the file could be added.

This same approach would be used with a Leaderboard Topic. The idea is that a Leaderboard Topic would have the same ability to send and receive messages as a person would. Granted people would have to be given access to actually perform either of these tasks, but the task could be done by representing the board. We still need to determine if everyone will be allowed to send mail from a Leaderboard Topic, or if mail from a Leaderboard could even be allowed to go external to the company. From a design standpoint, it should not make too much of a difference as long as a Leaderboard Topic is allowed to send and receive mail, and any person who has read access on a board could read messages in the Board inbox.

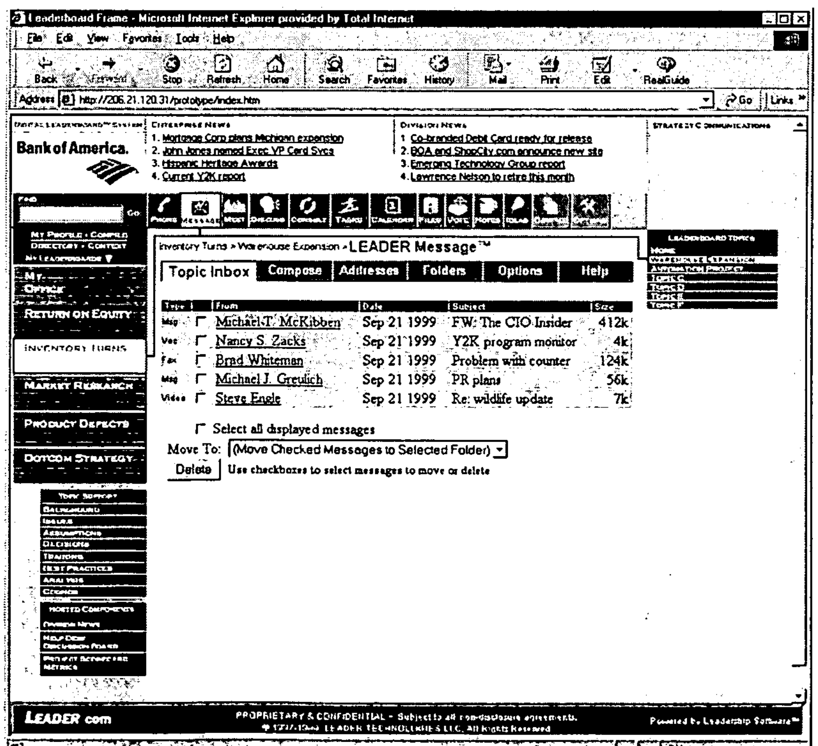
We need to have a link table between person and Message Topic to capture whether a person who has access to a board, has read a message or not. If they have not, they could have the message appear in a display that shows all new items on any board that a person has access to.

The message status field would be used to signify whether a message has been read, acknowledged, or is still new. This feature will be significant when a person selects compile from their One-touch toolbar, or if they have a virtual folder created to view new items. The acknowledge status allows the user to remove the item from the unread display without actually saying the message has been read. This way a person can be truthful, and say that they realize they have an item on their system, but they don't have an opportunity to read it yet, or may never actually need to read it. All of these features will allow the information to be displayed inside of a screen for processing message traffic.

Message Screen display

The message screen is intended to display all the necessary information about a message so it can be processed as quickly and efficiently as possible. It will list the subject of a message, the person who sent the message, the date of the message and the size of the message.

There are a number of functions a person can perform from the inbox window. They can read the messages, file messages in a virtual folder, delete messages, acknowledge messages (reference the compile functionality), or create reminders for messages. It will be also be



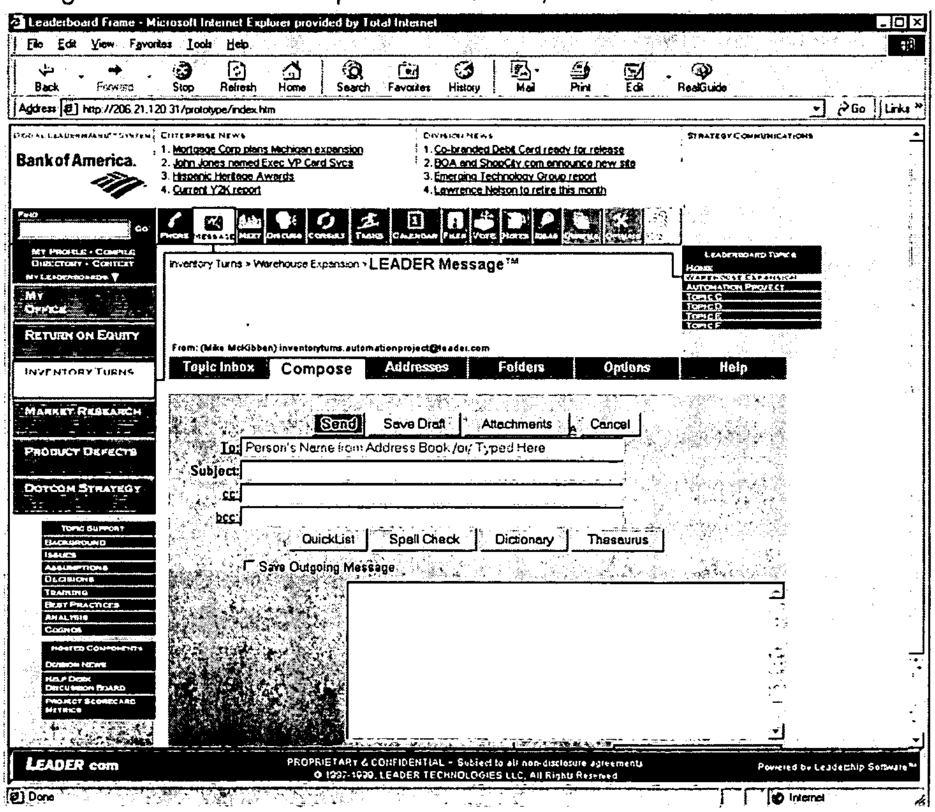
possible to select multiple messages from the messaging window and process them all in a similar way.

A person will also be able to create a totally new message from a Leaderboard/Topic. This will allow the "system" to communication with another person or Leaderboard and provide a valuble shared resource. Only people who have create authority on a Leaderboard will be able to reply to messages or create new messages. This process of having the system communicate is central to the Leaderboard system. It is the central core of the automatic context functionality. Having a message come from a Leaderboard, automatically creates the connections for the information in the message. Any responses to that message would be automatically placed in the correct Leaderboard/Topic inbox and would then also be automatically put in context.

The message view will support most typical messging features like forward, reply, reply all, address book maintenance, and compose new messages.

Virtual Folders

A virtual folder is a way to manually categorize information and remove it from the normal display screen. In other words, if a message is sitting in an inbox, a person working on a Leaderboard may want to get the message out of the inbox, but still keep it on the Leaderboard/Topic. An easy way to do this is to create a group listing of like items, which becomes a "folder" of information. The virtual folder is another way to categorize information and put it into context, and it removes some of the clutter from otherwise busy desktops.



Composing a new message

From any messaging board where a person has create authority, they will be able to create a new message. This will provide typical e-mail functionality for the creation of messaging. The associated screen provides an example.

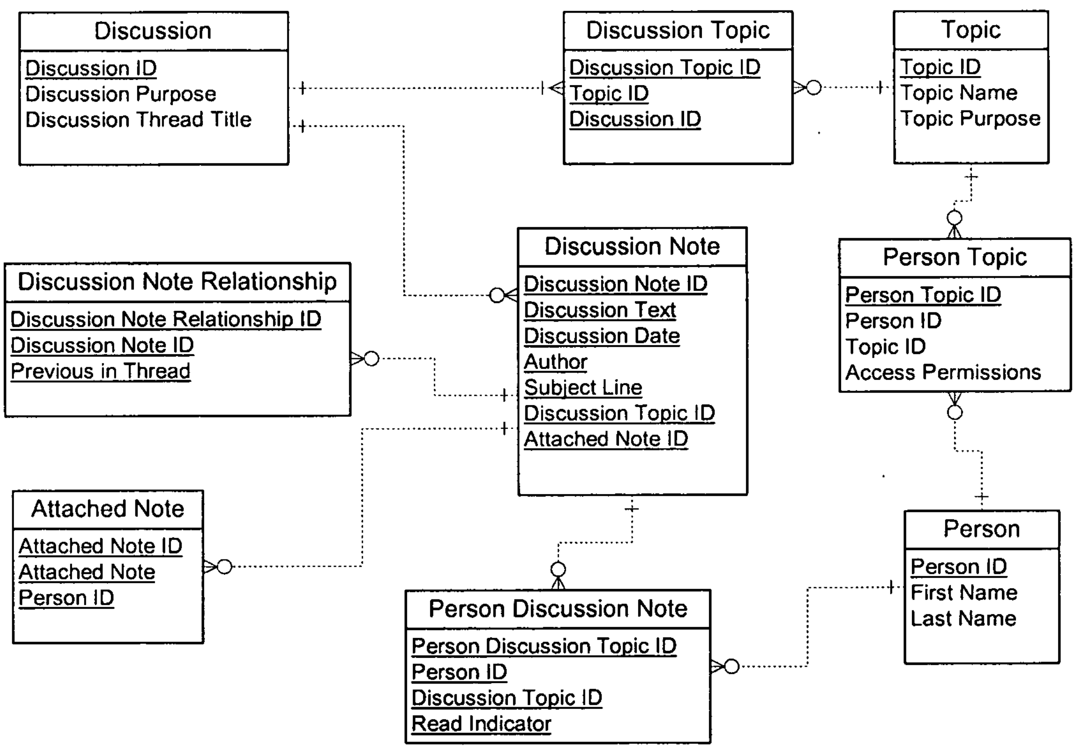
Address Book

The functionality and design of the Address Book will be covered in the section concerned with telephone calls. The address book will be the same for messaging, telephone calls, faxing, or capturing particular information about a person. A further discussion of the address book is contained in the Conference Calling section.

4. Discussion Board Functionality

A discussion board is intended to provide a place for a group of people to have a discussion on a particular subject or topic. Each Leaderboard will have the functionality of having a discussion on it. This includes the personal My Office Leaderboards. When a discussion is started, a person who has access to a particular topic on a Board goes to the Discuss Option and selects Start a New Discussion. They will be prompted for the Purpose of the Discussion and the Title of the Thread, and then they will be prompted to enter a discussion note.

The idea is that a person who has create or add permission to a board creates a new entry in the discussion table. This automatically creates an entry in the Discussion Topic table as the person is already in a topic on the particular Leaderboard. When this entry is made, the person will begin entering information into the Discussion Note table. This is the actual note on the discussion topic. Because this is the first note in a discussion, the Discussion Note relationship will list the note but will not have an entry for the previous in thread.



The discussion note relationship provides for a way to recreate the discussion thread. A note can be added anywhere in the thread after the first message. So, it will be possible to have multiple entries that reference the first message as the previous in thread. If this were the case the display would look something like this:

Message #1

→ **Message #2**

→ **Message #3**

→ **Message #4**

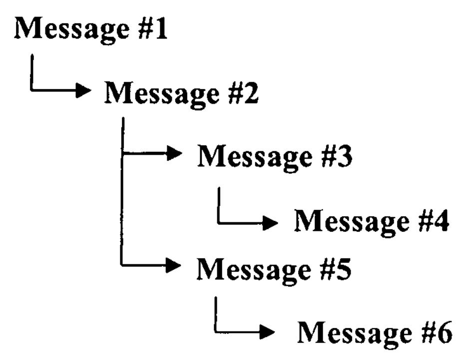
→ **Message #5**

→ **Message #6**

In this example, each of the messages are only related to the first message and not to any of the other messages. The database entries would look like Message #1: No previous
Message #2: #1 Previous
Message #3: #1 Previous
Message #4: #1 Previous
Message #5: #1 Previous
Message #6: #1 Previous

The purpose for this table is to show the context for a particular message, so a reader could see quickly where that particular message fits into a thread.

Another example would be where messages were built upon other messages in the thread. This example could look something like this:



In this case the database entries would look like:

Message #1: No Previous
Message #2: #1 Previous
Message #3: #2 Previous
Message #4: #3 Previous
Message #5: #2 Previous
Message #6: #5 Previous

In any case, while reading a discussion thread a person may want to make a particular entry at any point in the thread. This will allow them to do that.

The Person Discussion Table will be used to notify users of new items in the system. So, if there were a number of new discussion entries in the discussion note table, and these entries had not yet been acknowledged or read by a person, they would be listed on a compile of new items on this particular Leaderboard, or they would be listed on a Global Compile of all new items.

Attached notes can be added by anyone who has write permission to a Leaderboard. An attached note is like a sticky note attached to a particular item to add virtually any type of information. This attached note would be readable by anyone who has at least read access to a Leaderboard.

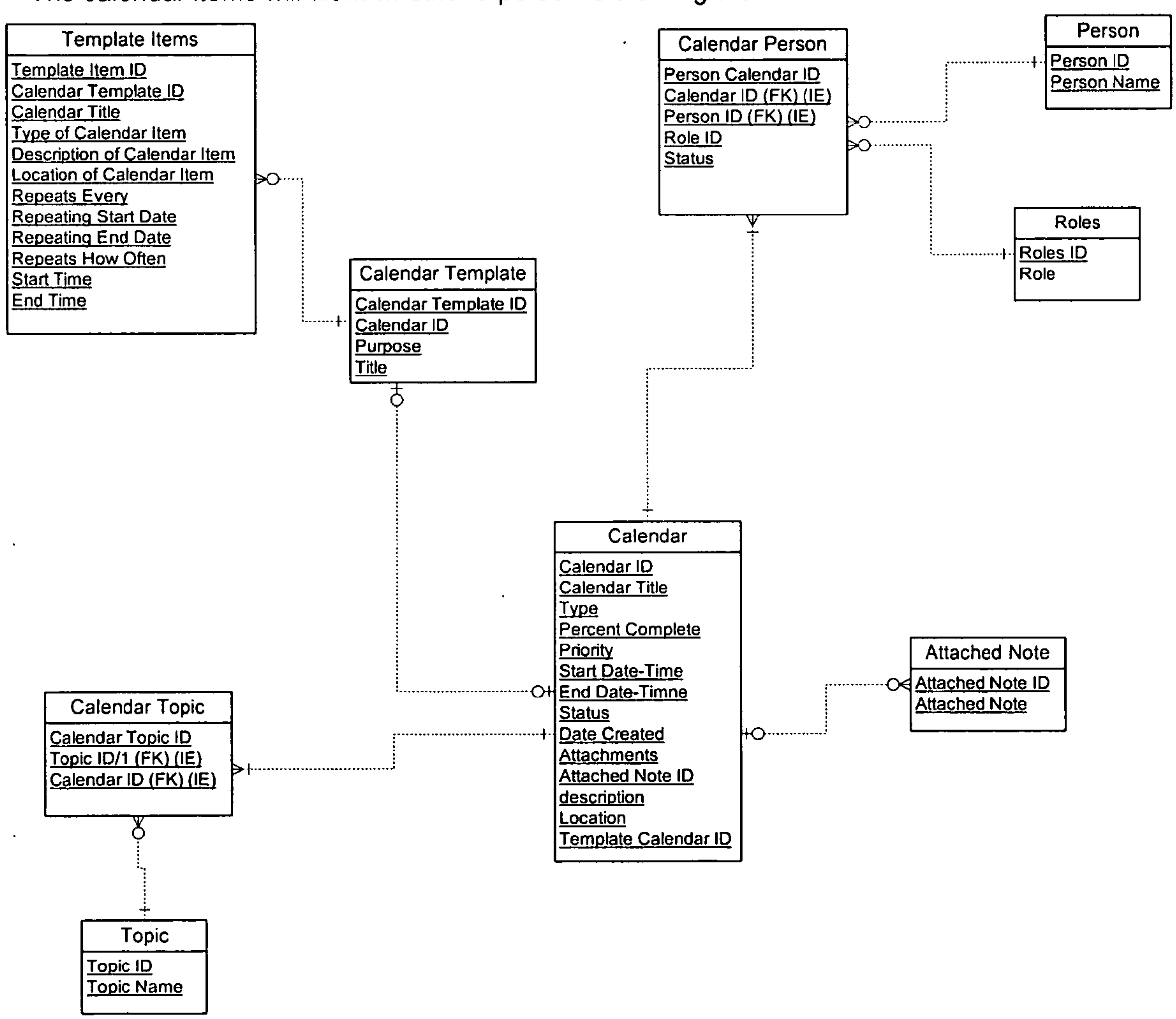
It is possible for a discussion to be shared across more than one topic. The entries in the Discussion topic table would only list the high level purpose of a discussion. So for example, if there was a discussion going on and someone decided that the information in the discussion would be value if it were shared with another topic on another Leaderboard, then they could create a new entry in the Discussion Topic table for that particular discussion. This would automatically cause the discussion to appear on the other topic.

5. Calendar Items

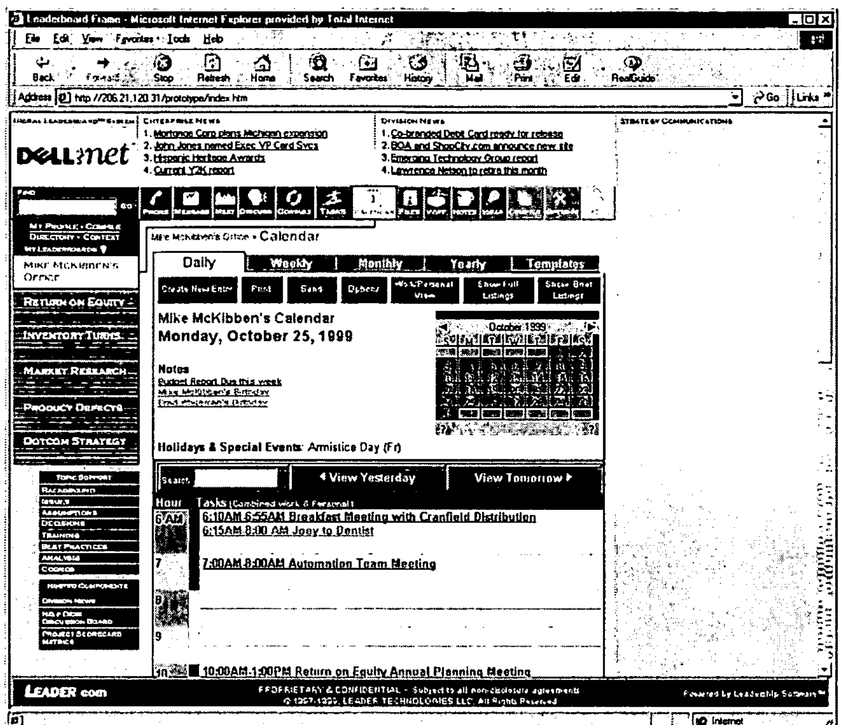
Calendar items are intended to be meetings, scheduled functions, or events that have a time based reference. In essence, any item that would be appropriate to have on a calendar would be included. The calendar table would contain all the information for each of these different types of items. We will just utilize a different screen to input or update the information, depending on what the item is. The type field in the calendar table will indicate the different types of calendar events.

An item can belong to one or many topics, and it can involve one or many people. The role field in Calendar Person indicates the role a person plays in an item. There will be many different types of roles, and in most organizations the roles will be called different things, so the roles are configurable and stored in a separate table.

The calendar items will work whether a person is creating the entries for themselves or whether they are creating events or meetings for other people. If people create an event for themselves, for example a reminder of a birthday, they will enter the data for the event and the role they will have is the person involved with the event. There will be an entry in the persons Personal Office (the Home page associated with a person's My Office), and there will be an entry in Calendar Person showing the event. When this person then views their schedule in their My Office desktop, they will see this event. If no one else is included in the event, and if the event is not associated with any other Leaderboard Topic, this will be the only place this event will show up. If a person assigns an event,



like a conference, to a group of people on a Leaderboard, then each of the people will have the item appear in their own task list, and the item will also show up on the group's Leaderboard.



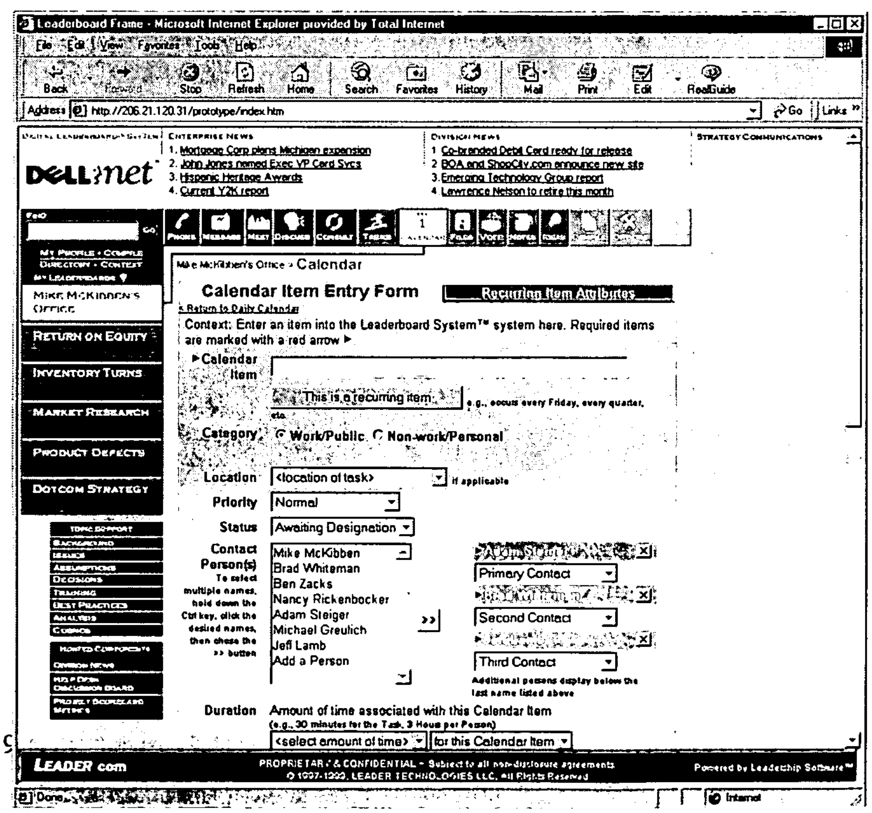
There are a couple of items worth noting. First, there is a status field in both the Calendar Person and Calendar tables. This is to allow for assigning an event to more than one person. If, for example, groups of people are all invited to a meeting the meeting will appear on all the persons Office boards, and as they acknowledge the meeting the status for that person will be annotated. This will allow a host of a meeting to be assured that everyone who was invited to a meeting was aware of the meeting.

Second, it will be possible to make each calendar item recurring. This means that Holiday's like the 4th of July can be listed as recurring every year. Meetings can be listed as recurring every day, week, month, or year at the same time and location. Events like paydays can be listed as recurring. The recurring table will capture the information necessary to recreate each of the recurring items. There can be a number of different variables when it comes to an item recurring. The table in the database to support this functionality is not finalized to allow for the developer to create the recurring feature as they best see fit.

Creating new calendar items:

Anyone with create permission will be able to add a new calendar item. A new calendar item could be something entered directly into a calendar for a person or group to see, or a new Meeting could be created and that would show up on the calendar too. There is more information about creating meetings in the meeting section.

The associated screen mock-up shows the process a person would go through to create a calendar item. A person must enter a Calendar



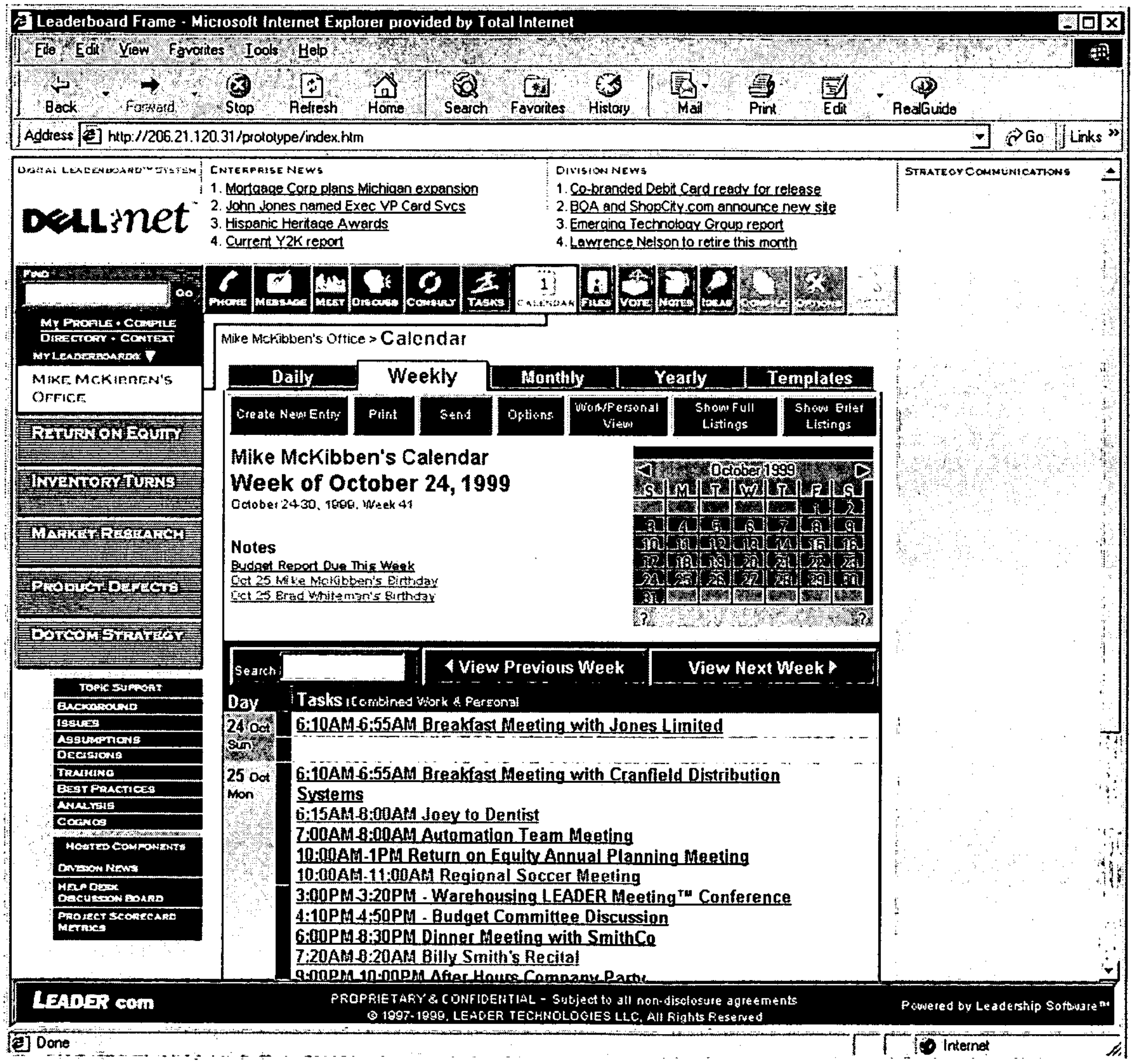
Item name and select the date(s) they would like to have the information on the calendar.

A person can also enter if they would like, a category for the item, location, priority, status, contact persons, duration or start stop dates and times, notes, and any files which should be associated with the item. If the item is recurring, that can also be handled on this form.

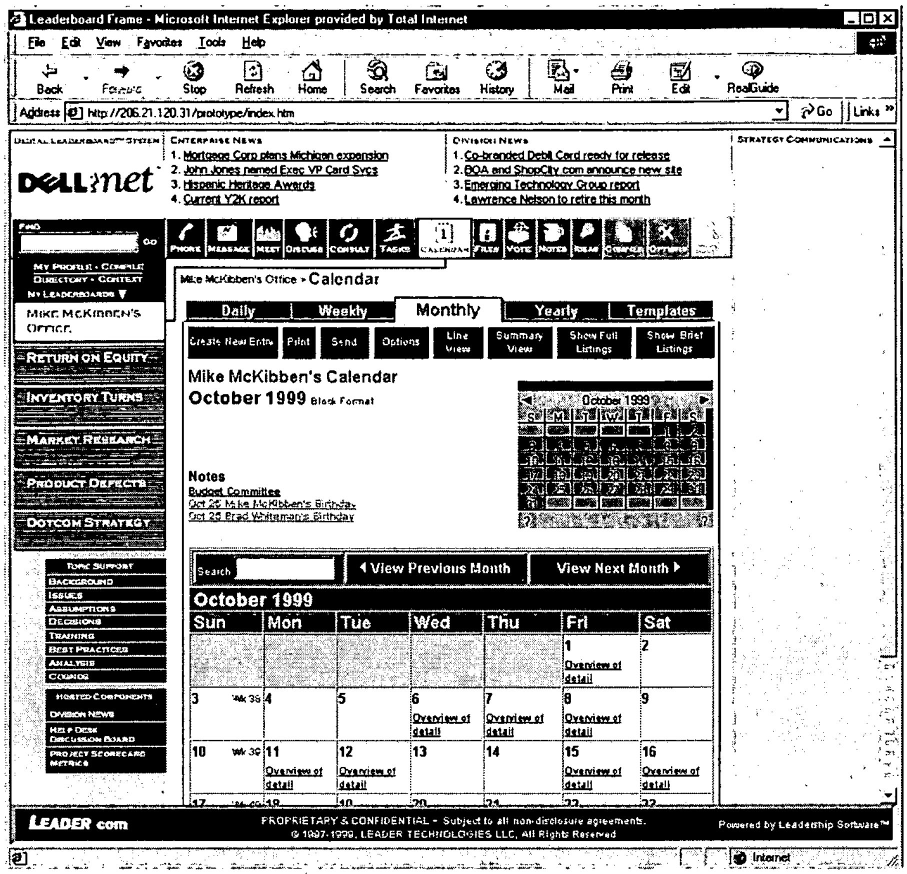
Viewing the calendar:

Anyone with read permission would be able to view and read a calendar. There are different layouts for viewing calendars.

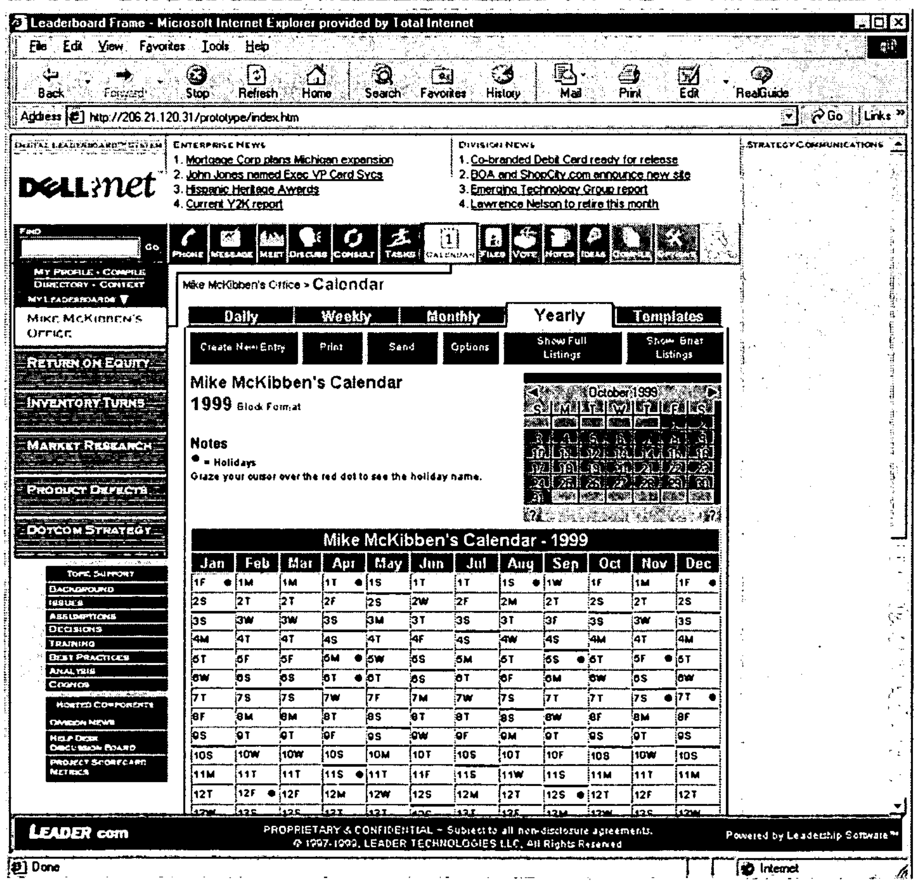
The daily view of a calendar is demonstrated at the top of this section. An example of a weekly view would be:



An example of a monthly view would be:



An example of a yearly view would be:



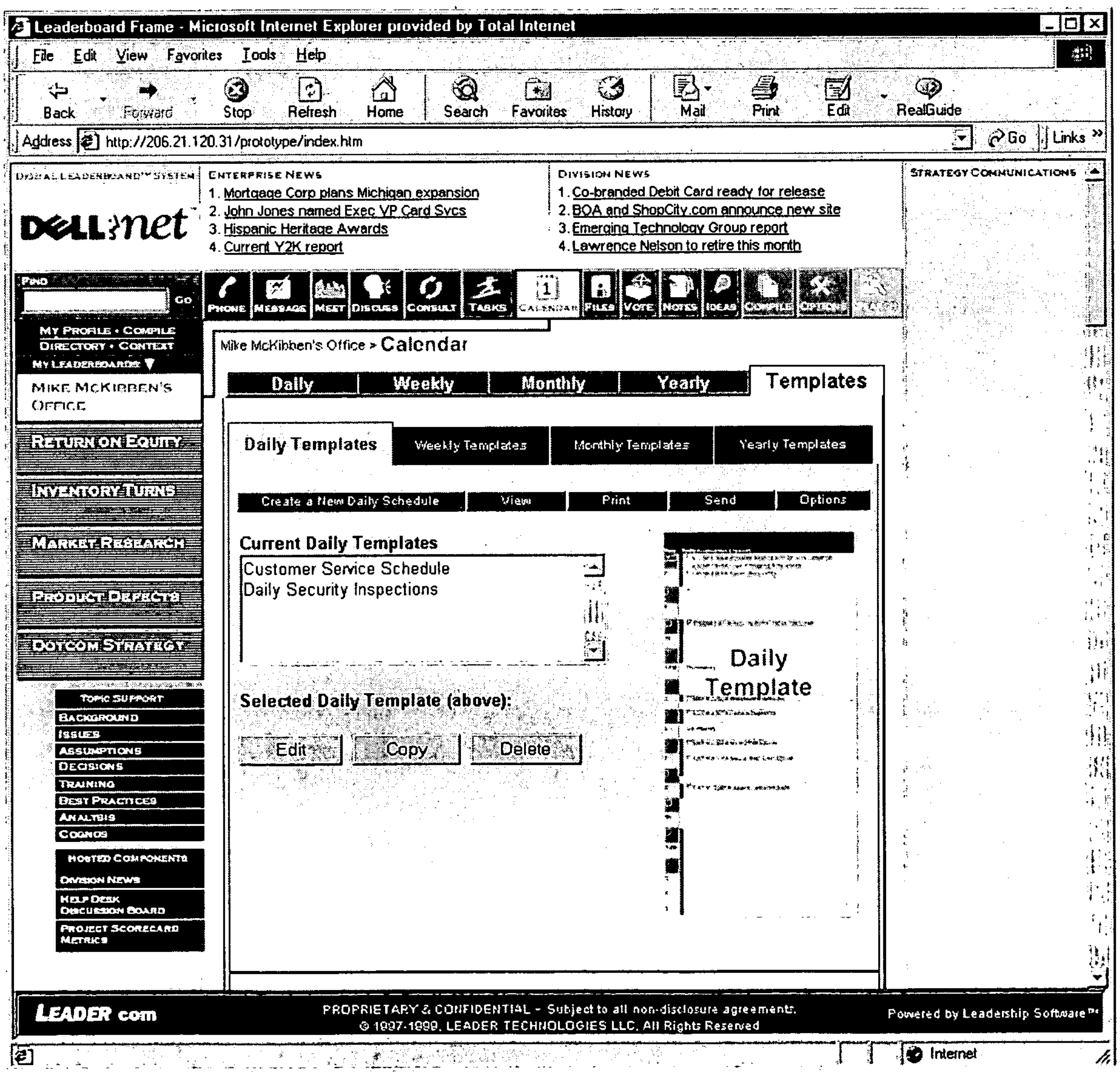
Templates:

A template is a special type of calendar item. A template can be created to support any group of schedule items that recur on a regular basis, or can be grouped together to create a generic calendar.

An example of a template could be if there was a particular series of events like an inventory. The calendar items, which make up the whole of the inventory, could be grouped together in a template and reused every time there is an inventory. People new to a job, may have a template created for them, so they can learn all of the events they need to perform in a given day.

Templates will probably be most useful in areas where certain tasks are repetitive but are done on an infrequent basis or in organizations that have high turnover.

In any case, a template groups together a series of calendar items and will apply them to an individual or Leaderboard calendar if requested.



Attached Files:

If a person attaches a file to a task or a meeting that is not currently in the topic, it will be added to the topic. The file could be located on a remote computer system, in which case the file will be uploaded and attached to the task or calendar event. If the file is already on the system just in another topic, another entry will be made in the topic file table corresponding to the particular file. Any type of file can be attached to a calendar event. It could be a voice recording, picture, presentation, spreadsheet, word processing file, or one of many other file formats.

Design Note:

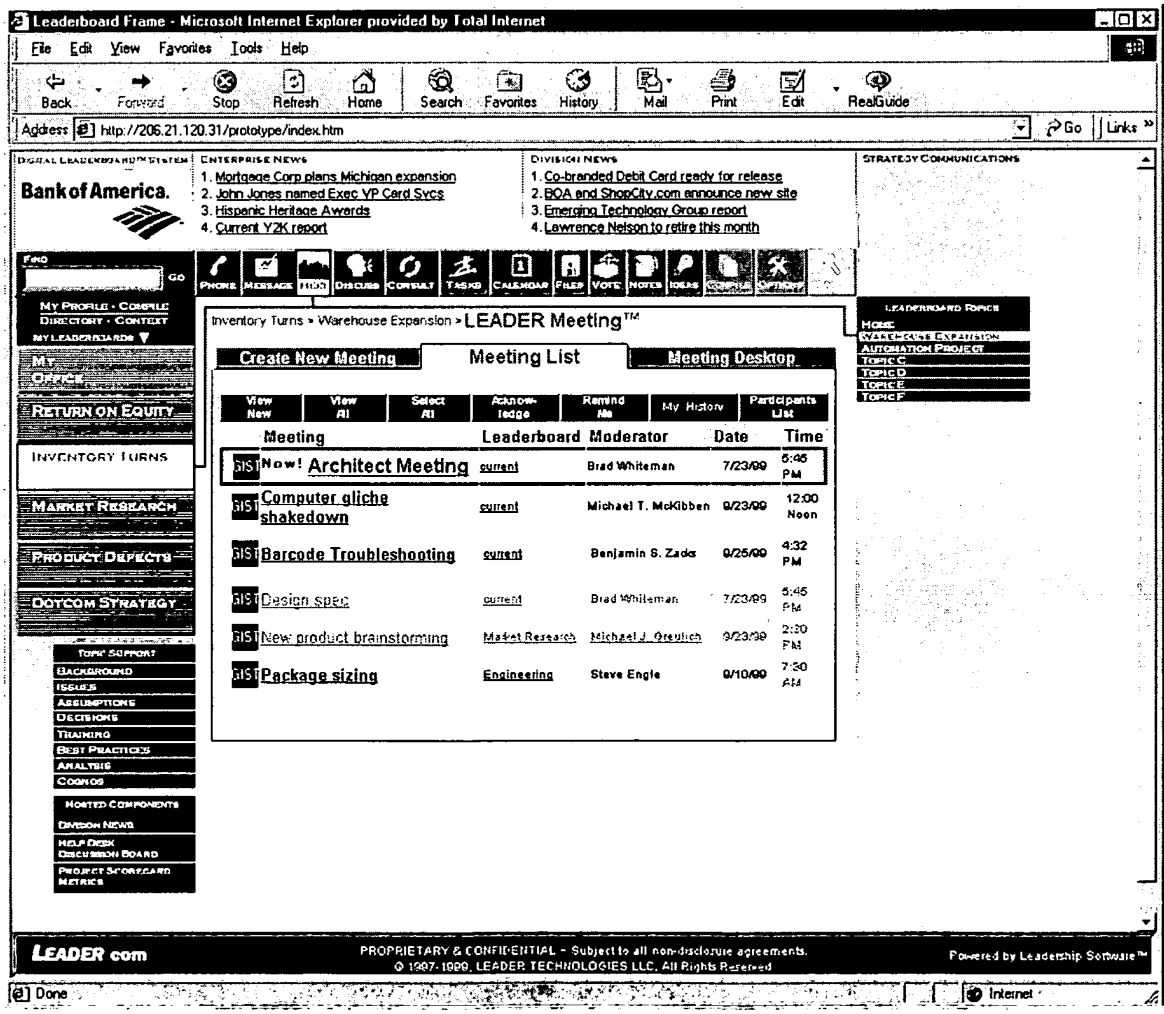
There is a field called attachments in the calendar table. It is there to designate whether there is an attached binary file to a calendar item. While this is not generally, the best database practice we may want to use other flag fields in other tables too, for performance reasons, or we may want to eliminate this field.)

Meetings:

Meetings are a unique kind of calendar event. They are not only scheduled and placed on a calendar, but they also occur on line and the information associated with each of the meetings is captured as part of the Leaderboard process.

Meeting List:

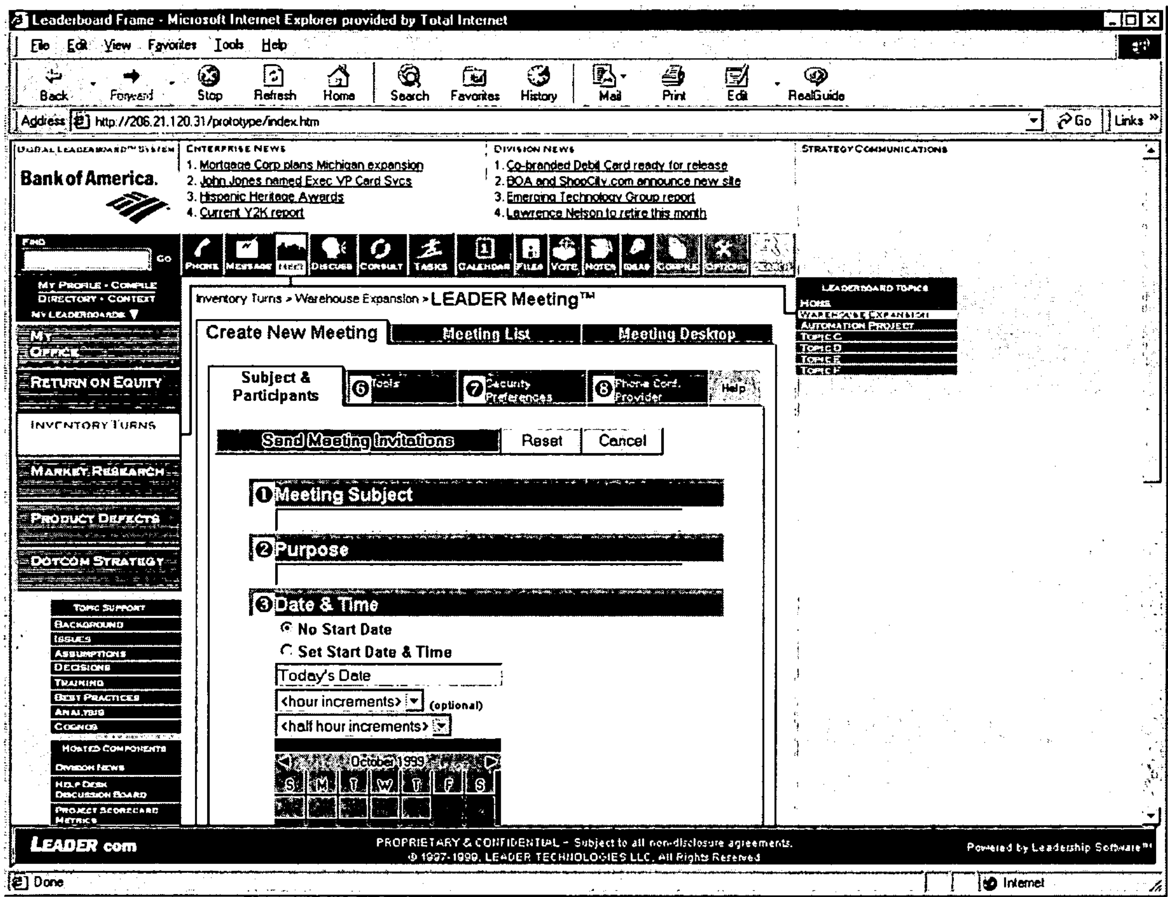
The default view for meetings is a list of meetings, which have already occurred, or are currently going on. A person will have the option of viewing meetings that have already taken place or joining in on a current meeting. There will be a lot of information associated with meetings and it is important to provide a person an easy way to review the information about that meeting. Most meetings a person participates in will be on a shared Leaderboard, but there will be occasions when a person is invited to a meeting which is being hosted on a Leaderboard, but the person does not have access to the Board itself. Rather than go through the process of getting a person added to a Leaderboard just for the meeting, the meeting in this case will appear for this person in their Office. So they will select and participate in the meeting from their office while the rest of the people in the meeting could be on a Leaderboard. It works this way because a meeting can belong to multiple board/topics. For each board/topic it is associated with, it will appear on that forum.



Creating a Meeting:

Anyone with write permission on a Leaderboard/Topic can create a meeting. Just as with face to face meetings, virtual meetings can have varying purposes, any number of participants, and different approaches. There is no one single meeting style that the Leaderboard meeting forces a person to use.

To create a meeting, a person first needs to decide what the purpose and the subject of the meeting is going to be.



Then they have to select a date and time for the meeting. The screen will provide a calendar to assist in selecting a date. Then they would need to select the participants for the meeting.

If there are any files or read ahead information for the meeting it should be included too. Attached documents are part of the tools section for a meeting. Other tools include the Meeting Feature itself, Phone Conferencing, Projector functionality, Chat, e-mail, tasks, and archives. Each of these tools if selected will be available from the on-line meeting.

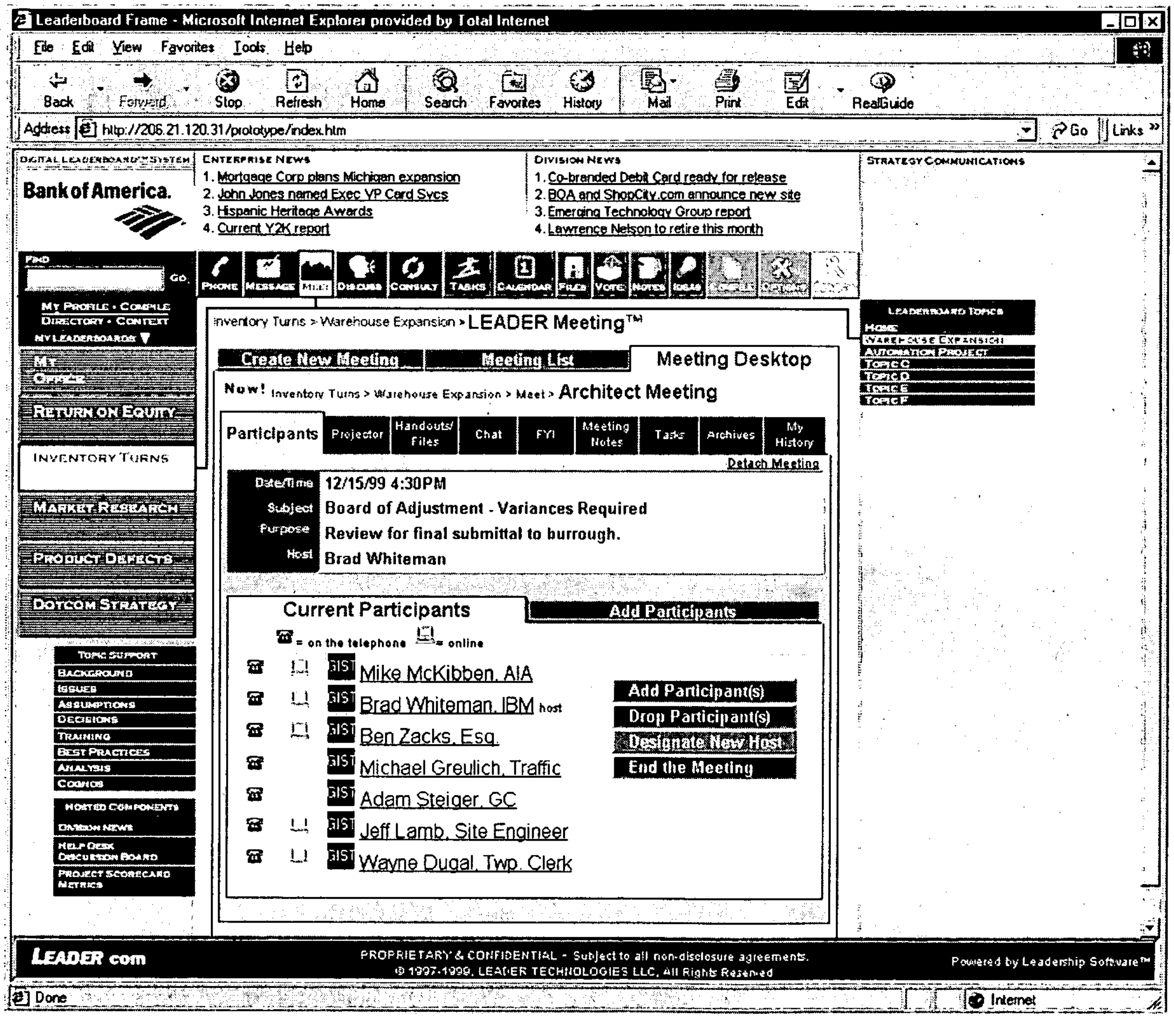
If people will be connecting with the conference-calling feature, then a telephone carrier provider can also be chosen.

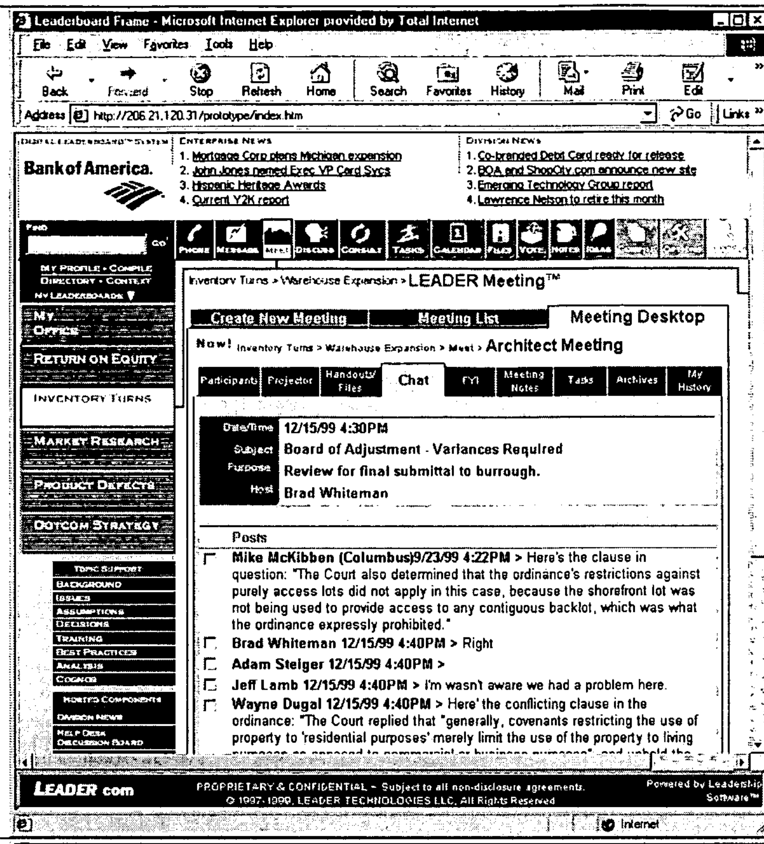
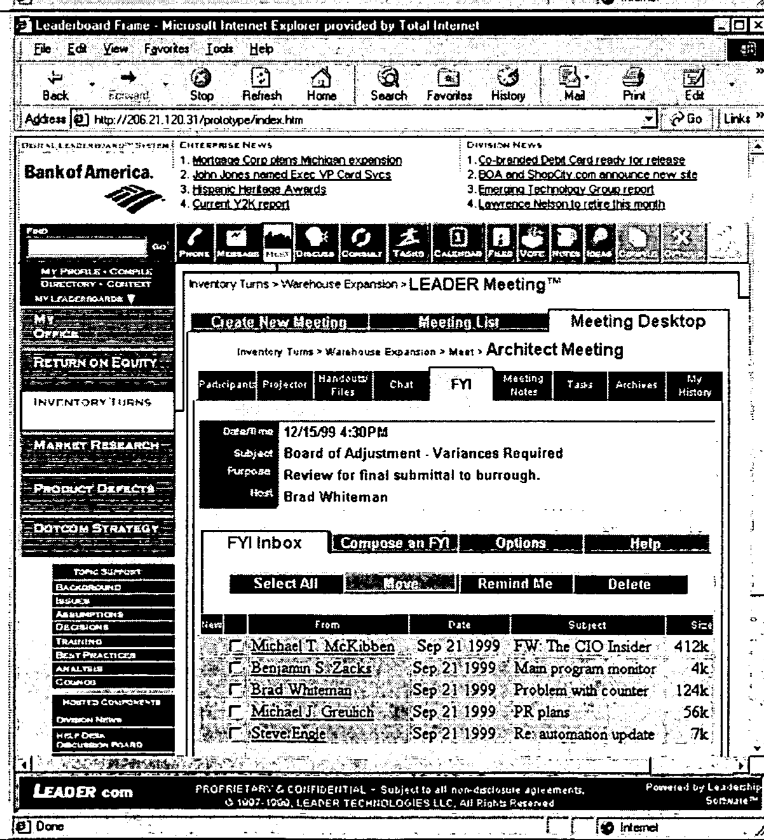
Meeting Desktop:

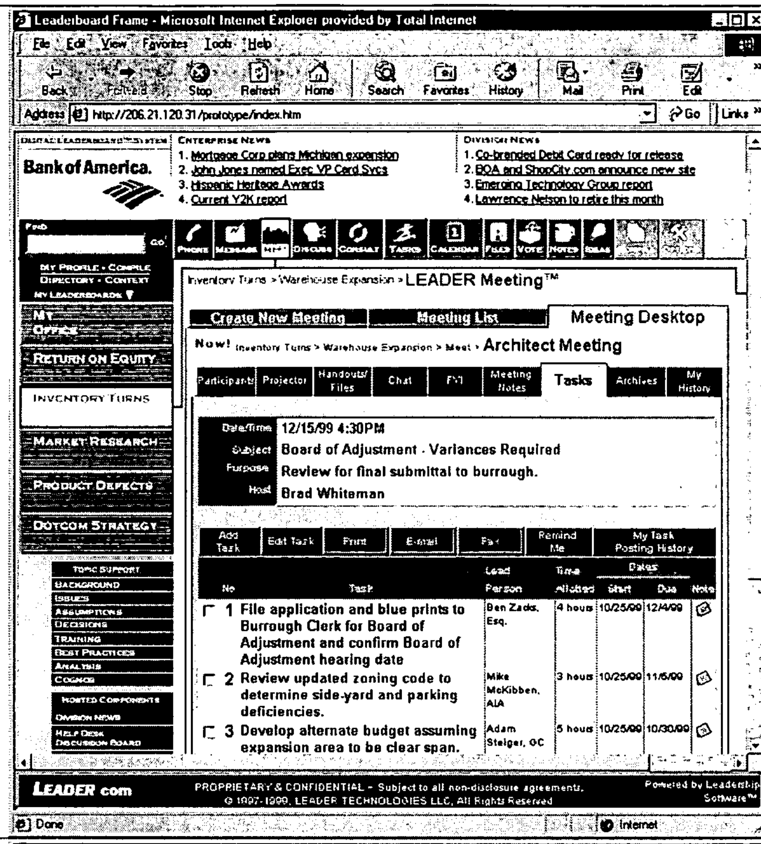
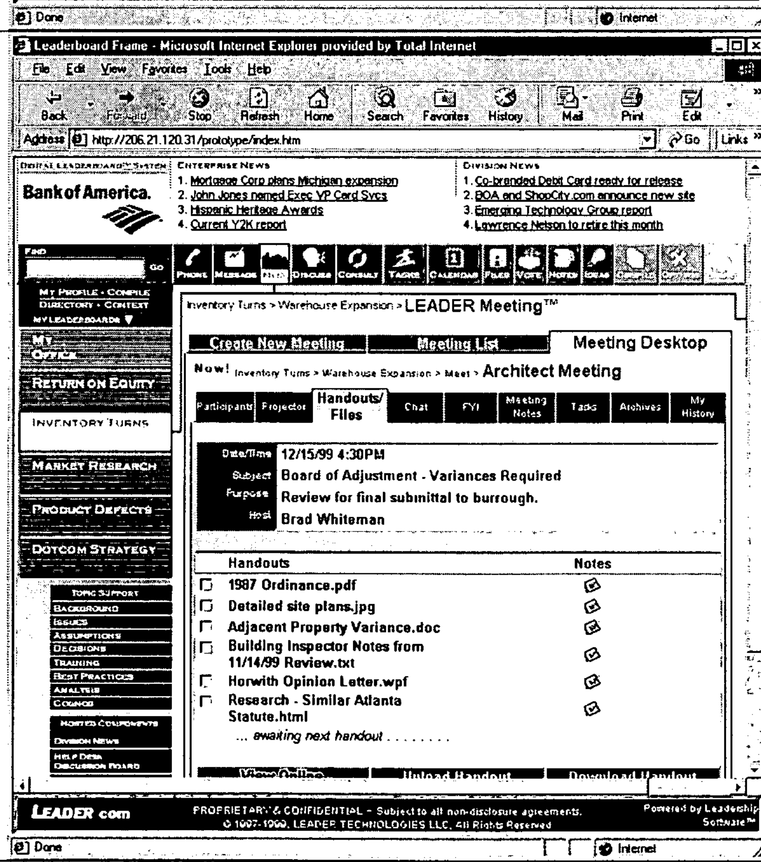
The meeting desktop is the actual location where the on-line meeting occurs. After a user selects a meeting to join, they will be taken here. This desktop provides all the tools that were previously selected as necessary for the meeting.

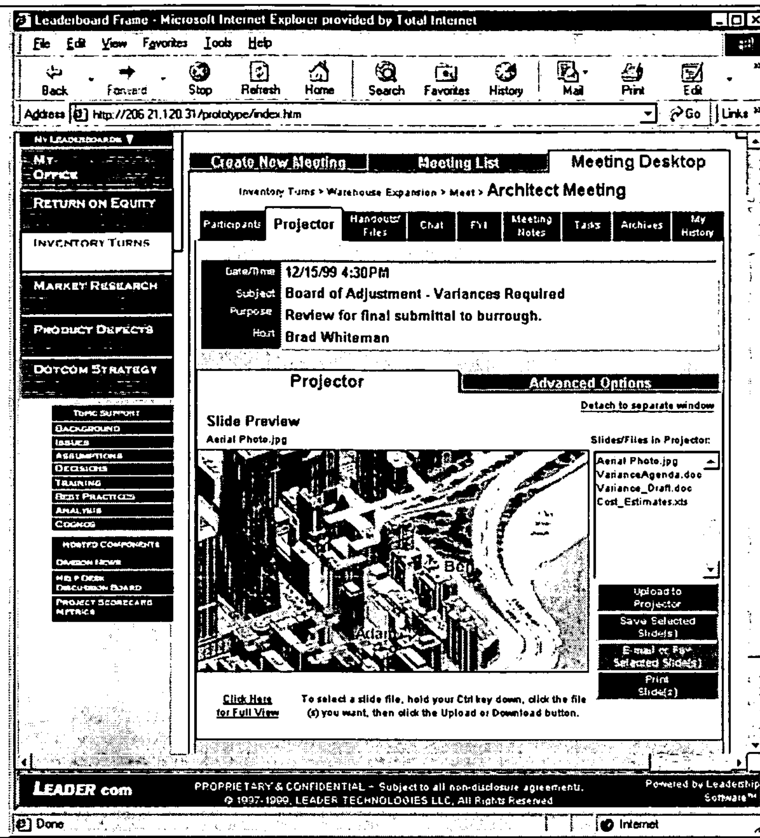
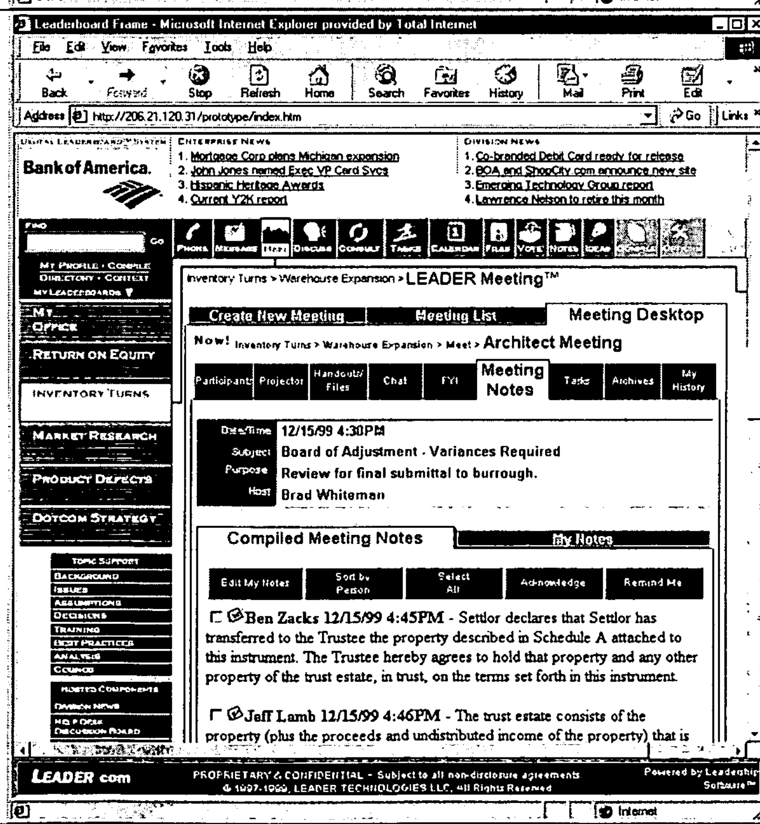
As the following screen shows, it will list the various participants in the meeting, including their status, it will also allow the host to add or drop people from the meeting.

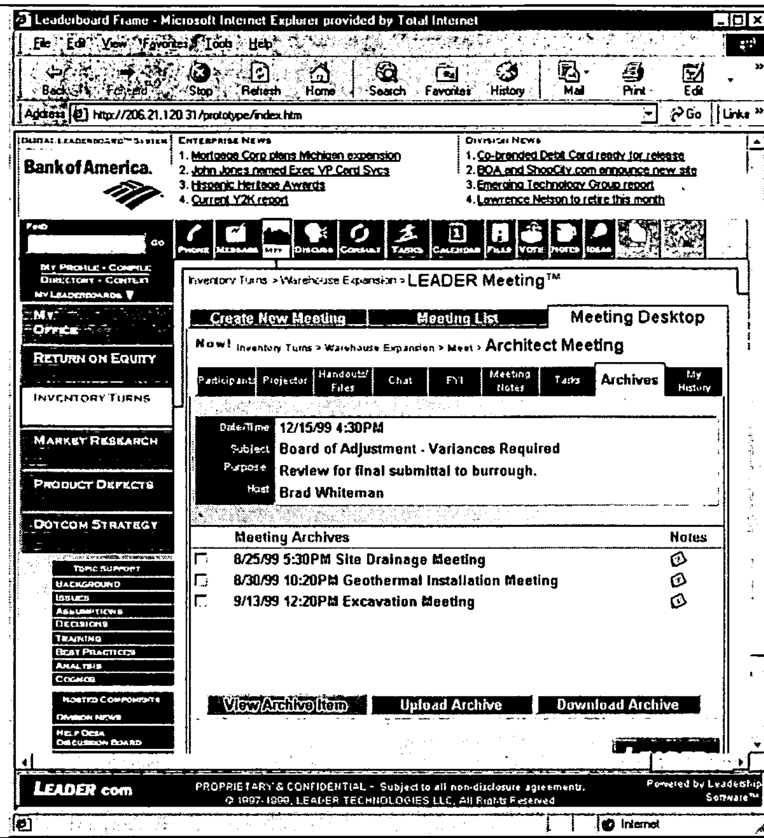
The meeting itself can have a large number of components. It can have chats, FYI messages, tasks, files, projector show, notes, and meeting archives. A meeting can utilize any or all of these component features.



Chats	Chats are where on-line conversations take place in a written forum. All the participants in the meeting can be a part of the chat and they can add a comment at any time.	
FYI Messages	FYI Messages are like passing notes in the meeting. It can have additional files attached. The idea is that people will use this as they would a note in a meeting. They can just hand the note to someone, or they can attach a note to a larger document.	

Tasks	This is a shortened way to create a to-do task for members of the meeting. If action items occur as an outcome of the meeting, they could be automatically connected to the appropriate person.	
Files	These can be of any type. The only common thread is that they need to be shared with the other people in the meeting. The viewing of these files would take place off line by each individual.	

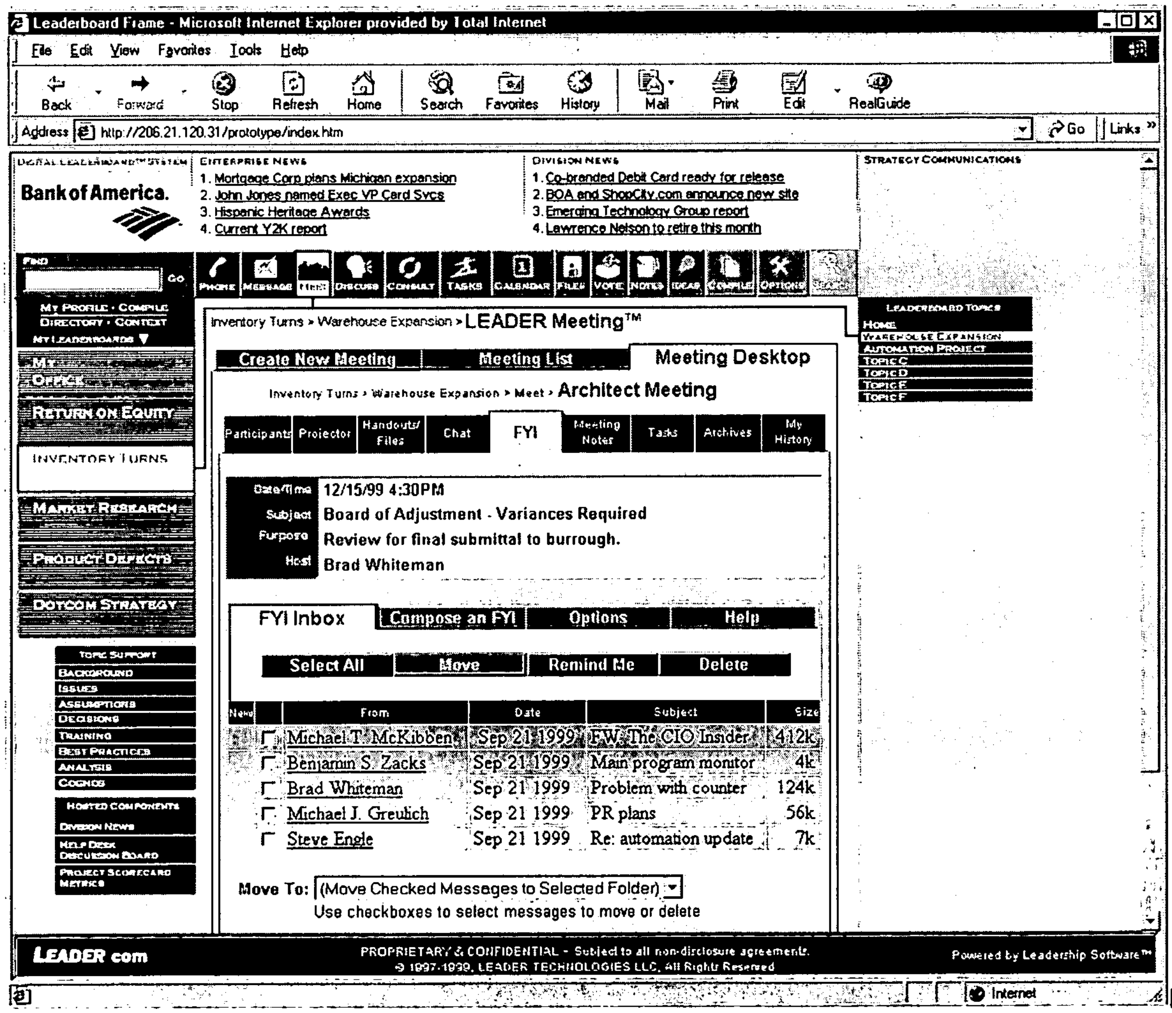
<table>
<tr>
<td>Projector Show</td>
<td>The difference between a file and a projector is that the projector show will display a file, presentation or picture for all the meeting participants to see. It will be a part of the overall meeting flow.</td>
<td>
</td>
</tr>
<tr>
<td>Notes</td>
<td>This is a place for a person to take any individual notes they want to capture having to do with the meeting. There are two types of notes. One set is the group notes, which will be the public record for the meeting, and the other will be private and only belong to the person taking the notes.</td>
<td>
</td>
</tr>
</table>

Meeting Archives	Archives are lists of meetings, which have taken place in the past. They are listed here in case any of the members wish to refer back to previous meeting information.	

6. FYI note in the meeting function

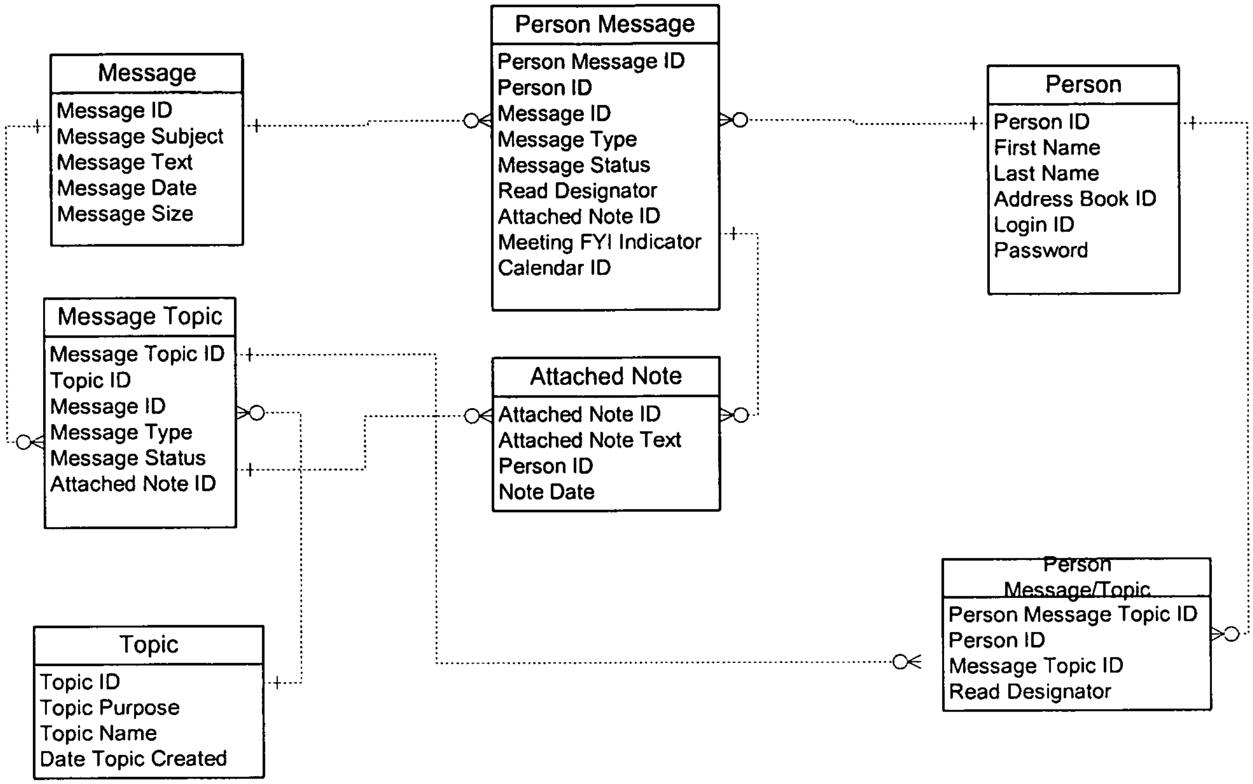
This feature is intended to simulate the process of two (or more) people sharing a piece of information privately in a meeting. Specifically, if a person were to take a document and put a sticky note on it, and give it to another meeting participant.

It is not intended to replace e-mail, chat, or other communication features, but rather to provide an alternative medium if participants wish to take advantage of it. Under normal circumstances, the participants in a meeting would have handouts (files) they would share, they could have chats, and they could be on conference calls while on-line. In each case, all those mediums are for sharing information with the whole group. E-mail would be useful before and after a meeting, but when a group is "together" in a meeting, they are able to 'slide documents across the table even in a virtual environment.



In order to keep control of system processing, we will be sharing these notes between people using direct notification during the meeting. What this means is that the system will not be checking for new e-mail on a regular basis for the participants in the meeting. Instead, when someone sends an FYI to another person(s) in a meeting, the receiving person will be notified that there is a new message. The system can expect that person to be on the system because they are participating in an on-line meeting. Therefore, the notification will be a push technology rather than a pull.

This functionality has some very nice benefits. For one, it does not litter up the e-mail system with messages, which are not really being mailed to someone else. It provides very tight context for the message. It is not only within a Leaderboard -> topic -> person but it also is within the subject of the meeting.



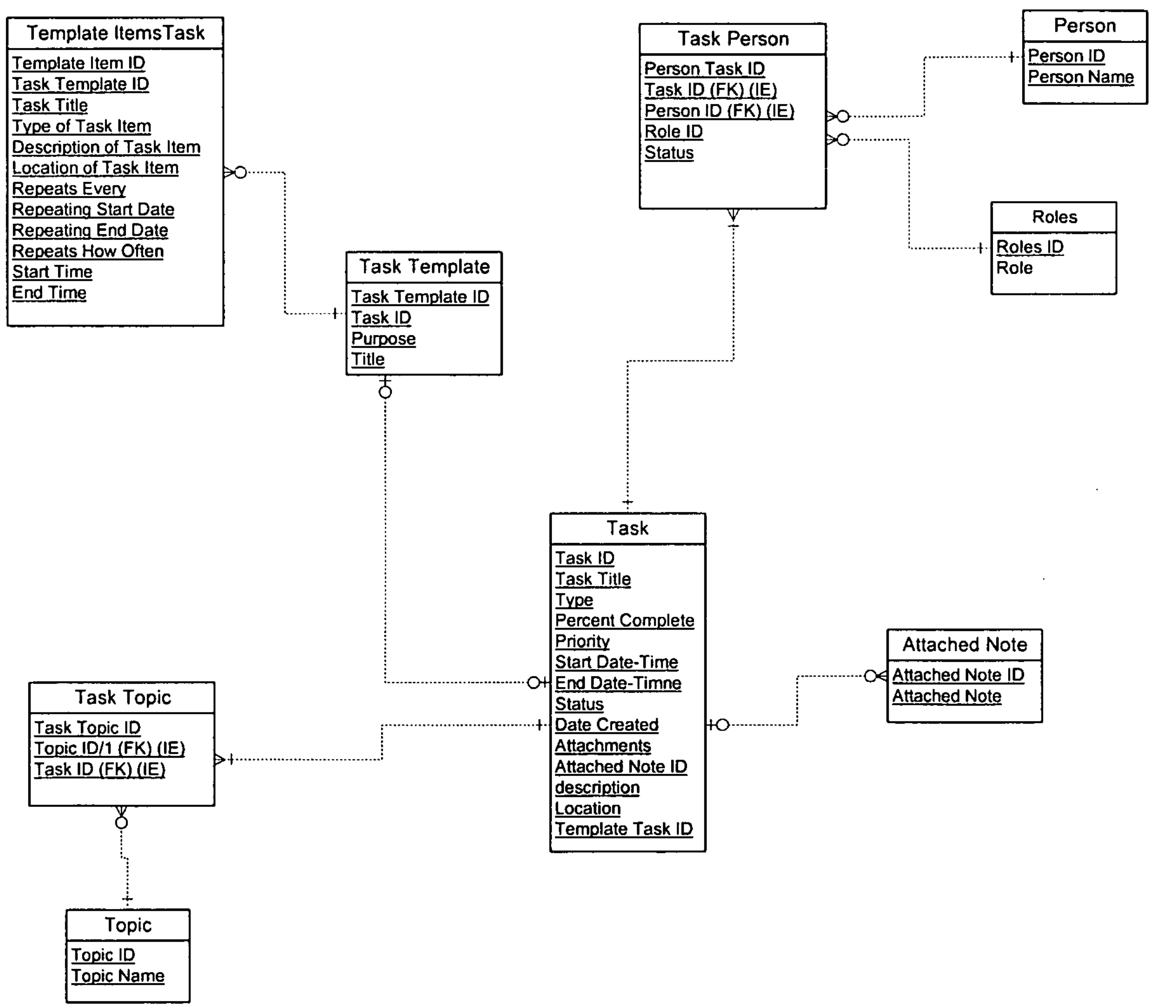
It does mean that we need to have a relationship between calendar (meeting) and message. Even if we don't officially mail the message from one person to another, it is technically passed from person to person. Therefore, we need to capture the message, the participants, the subject, and the rest of the information about the message in the message table. It doesn't make sense to recreate the whole storage mechanism for messages just because these particular types of messages are not being transmitted through the e-mail system.

It appears that the changes we need to make to support this are adding an indicator field to Person Message. This will identify those messages that are associated with a meeting, and then adding a place to put the key field for that meeting. The relationship between Person Message and Calendar will be, a calendar record can have one or many person messages records but each person message can only have one calendar record. Both relationships are optional.

7. Task Items

A task item is an item or job, which has to be accomplished. In many ways, tasks are very similar to calendar items. People can assign a task to themselves or a task can be assigned to another person. There are many different types of tasks to be accomplished and the type field in the task table will indicate the different types of tasking.

An item can belong to one or many topics, and it can involve one or many people. The role field in Task Person indicates the role a person plays in an item. There will be many different types of roles, and in most organizations, the roles will be called different things, so the roles are configurable and stored in a separate table.

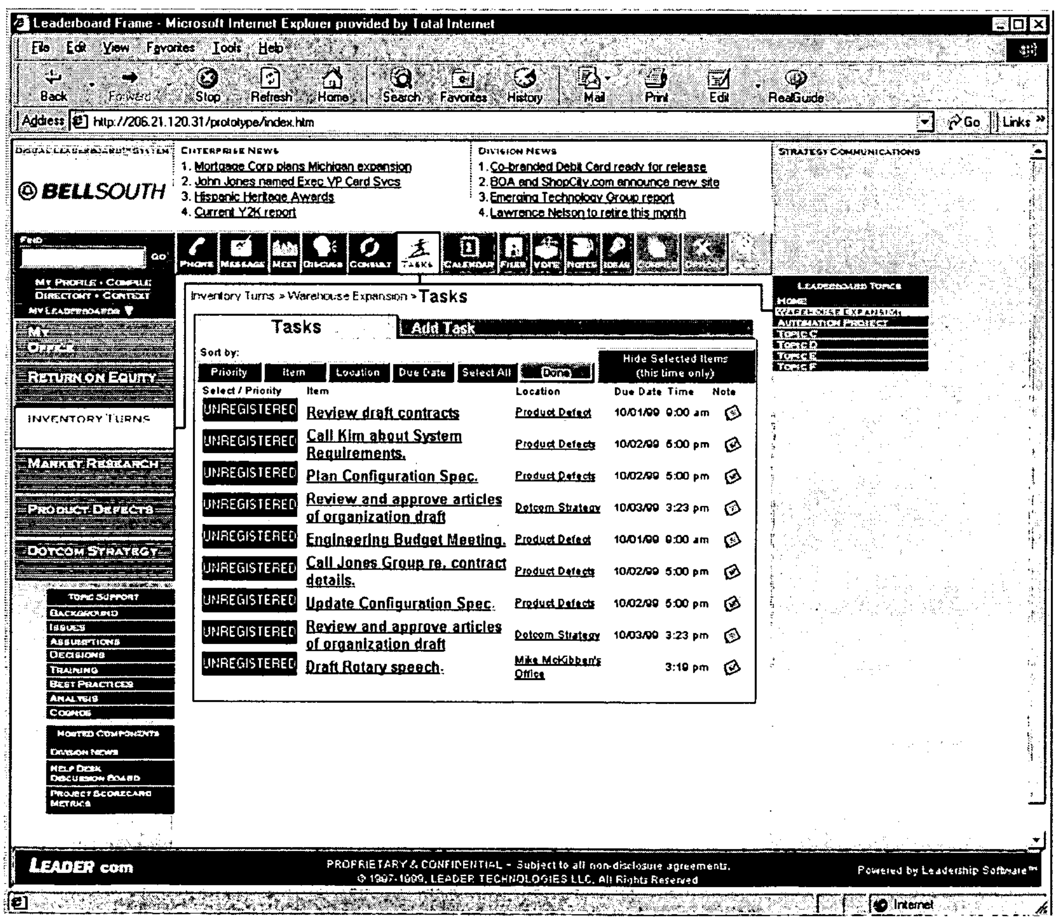


The task items will work whether a person is creating the entries for themselves or whether they are creating events or tasks for other people. If people create a task for themselves, they will enter the data for the task and the role they will have is the person performing the task. The entries will be to the persons Personal Office (the Home page associated with a person's My Office), and there will be an entry in Task Person table showing the assignment of the task. When this person then views their tasks in their My Office desktop, they will see this task. If no one else is assigned the task, and if the task is not associated with any other Leaderboard Topic, this will be the only place this task will show up. If a person assigns a task to a group of people on a Leaderboard, then each of the people will have the item appear in their own task list, and the item will also show up on the group's

Leaderboard. There are a couple of items worth noting. First, there is a status field in both the Task Person and Task tables. This is to allow for assigning a task to more than one person. If, for example, groups of people are all assigned to read something, then as they complete the assignment, they can complete the task item in their personal to-do list. We will also be able to roughly figure out percent complete from a multiple tasking by figuring the percentage of assigned people who have completed the task. There will also be the option of completing the task in the task screen. If this is done, then the individual task should be annotated as complete as well.

Second, it will be possible to make each task item recurring. This means that tasks that have to be done on a recurring and regular basis can be entered once and the listing will generate for each occurrence. The recurring table will capture the information necessary to recreate each of the recurring items. There can be a number of different variables when it comes to an item recurring. The table in the database to support this functionality is not finalized to allow the developer to create the recurring feature as they best see fit.

There is a field called attachments in the task table. It is there to designate whether there is an attached file to a task item. While this is not generally, the best database practice we may want to use other flag fields in other tables too, for performance reasons, or we may want to eliminate this field.)



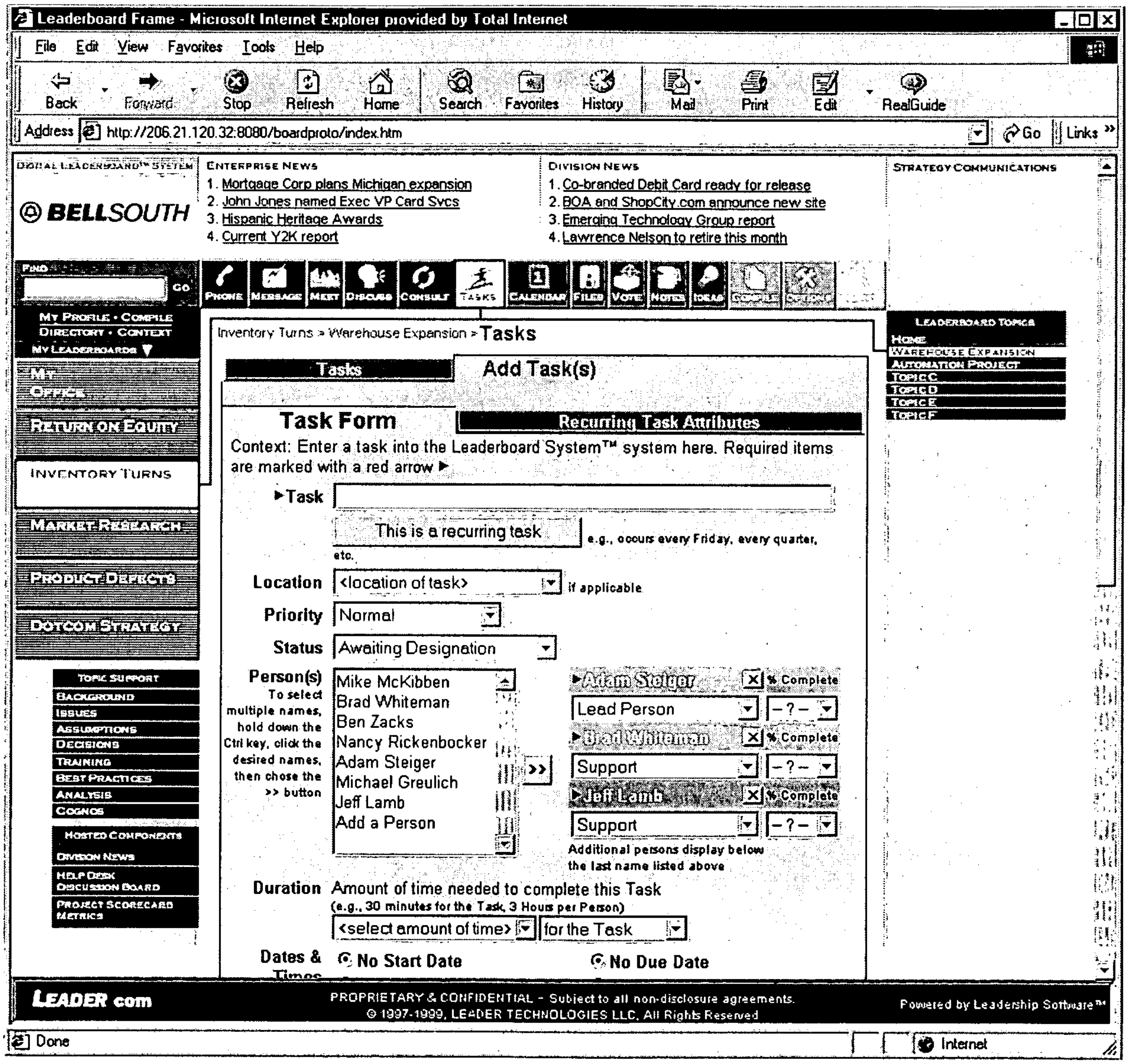
If a person attaches a file to a task that is not currently in the topic, it will be added to the topic. The file could be located on a remote computer system, in which case the file will be uploaded and attached to the task or calendar event. If the file is already on the system just in another topic, another entry will be made in the topic file table corresponding to the particular file.

New Tasks:

Creating a new task will be very similar to creating a new calendar item. The same types of data are required. The following screen mock-up provides an example of the screen a users would see when entering a new task.

One difference is that all tasks have to be assigned to some person. The person field will be a mandatory field. It will also be possible to assign a task to a group of people.

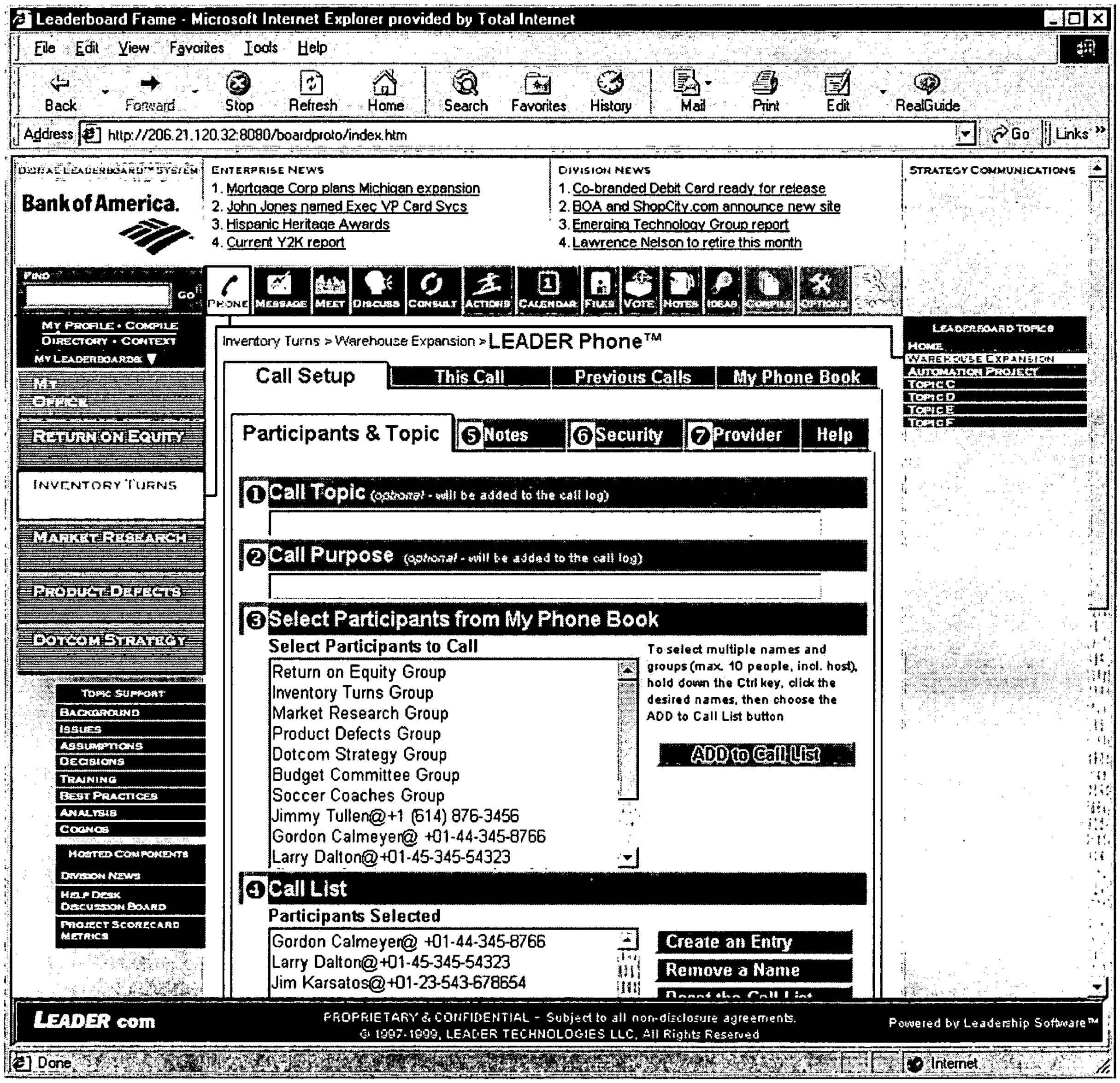
Some tasks may have a due date and if they do it will be entered. Like calendar items, it will be possible to write notes on the tasks.



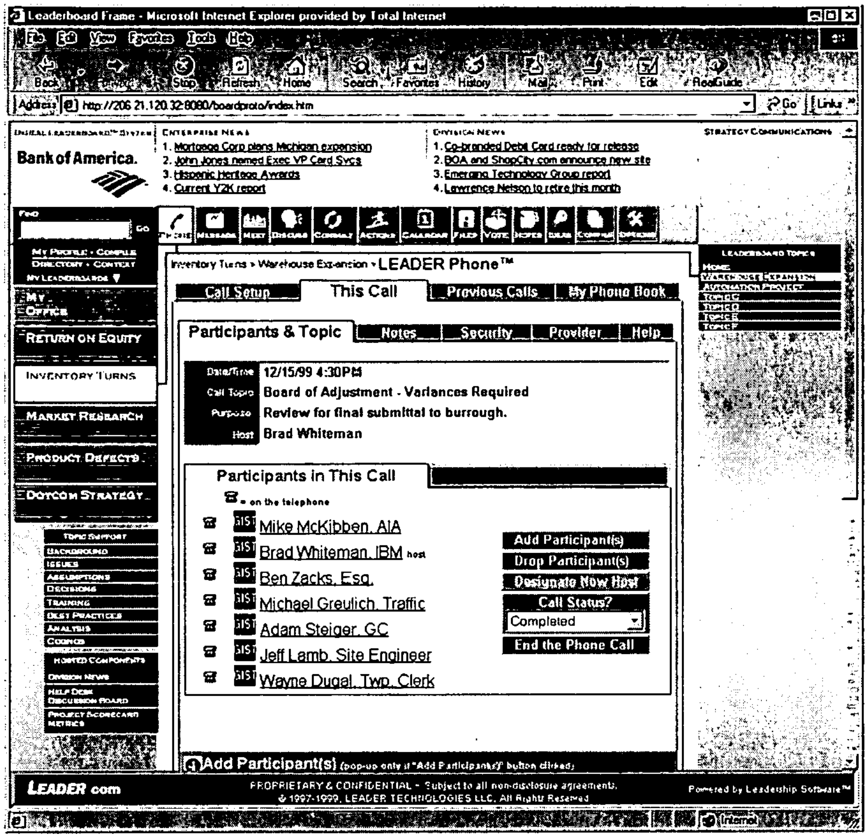
8. Conference Calling

Conference calling is very similar to on-line meetings except that only one person would be on-line in the system and the rest of the people would be connected via a telephone. The same technology will be used when making conference calls from inside of the meeting function.

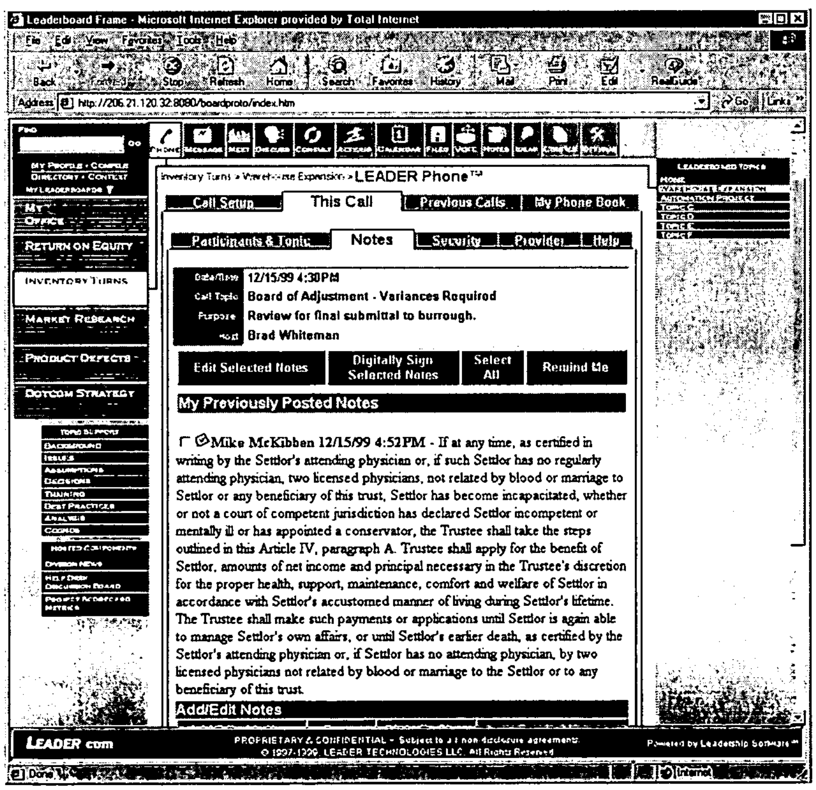
When a person places a telephone call, they will be provided with a set of options similar to setting up a meeting. The will select a topic, a purpose, select the participants, and place or schedule the call.



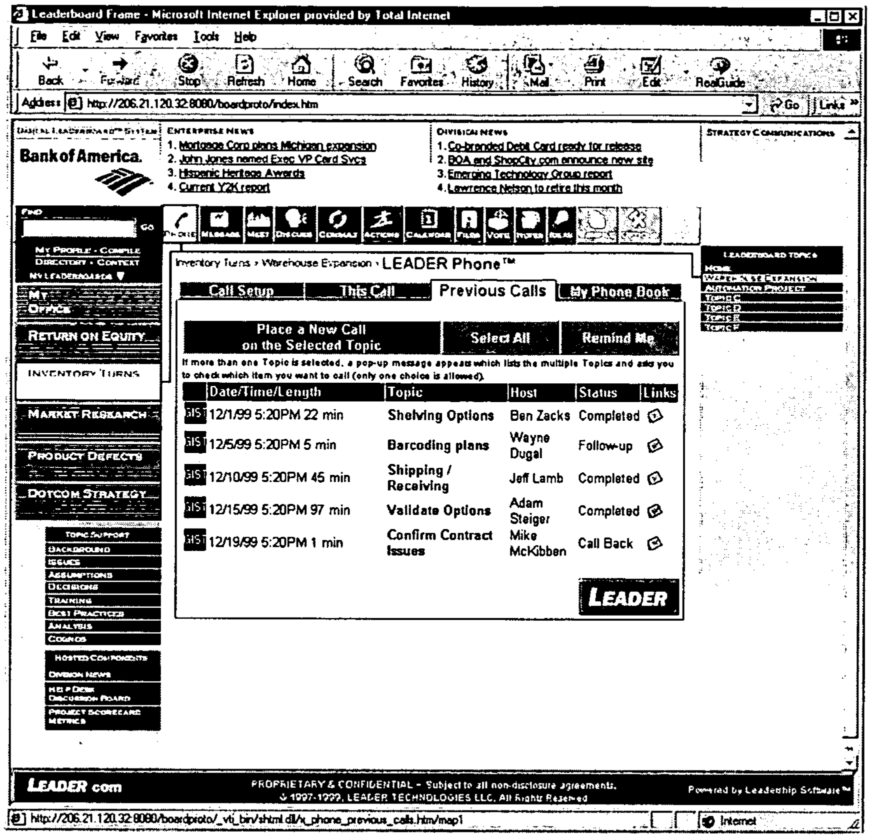
After a call is setup, it can either be scheduled for a future date, or it can be placed at that time. When a person initiates the call, they will be working from a screen similar to the one below. It will list the people schedule to be on the call and the status of their participation. The host will have a number of options on the call. They can keep notes, add people, drop people, or terminate the call.



This is an example of the call notes screen:



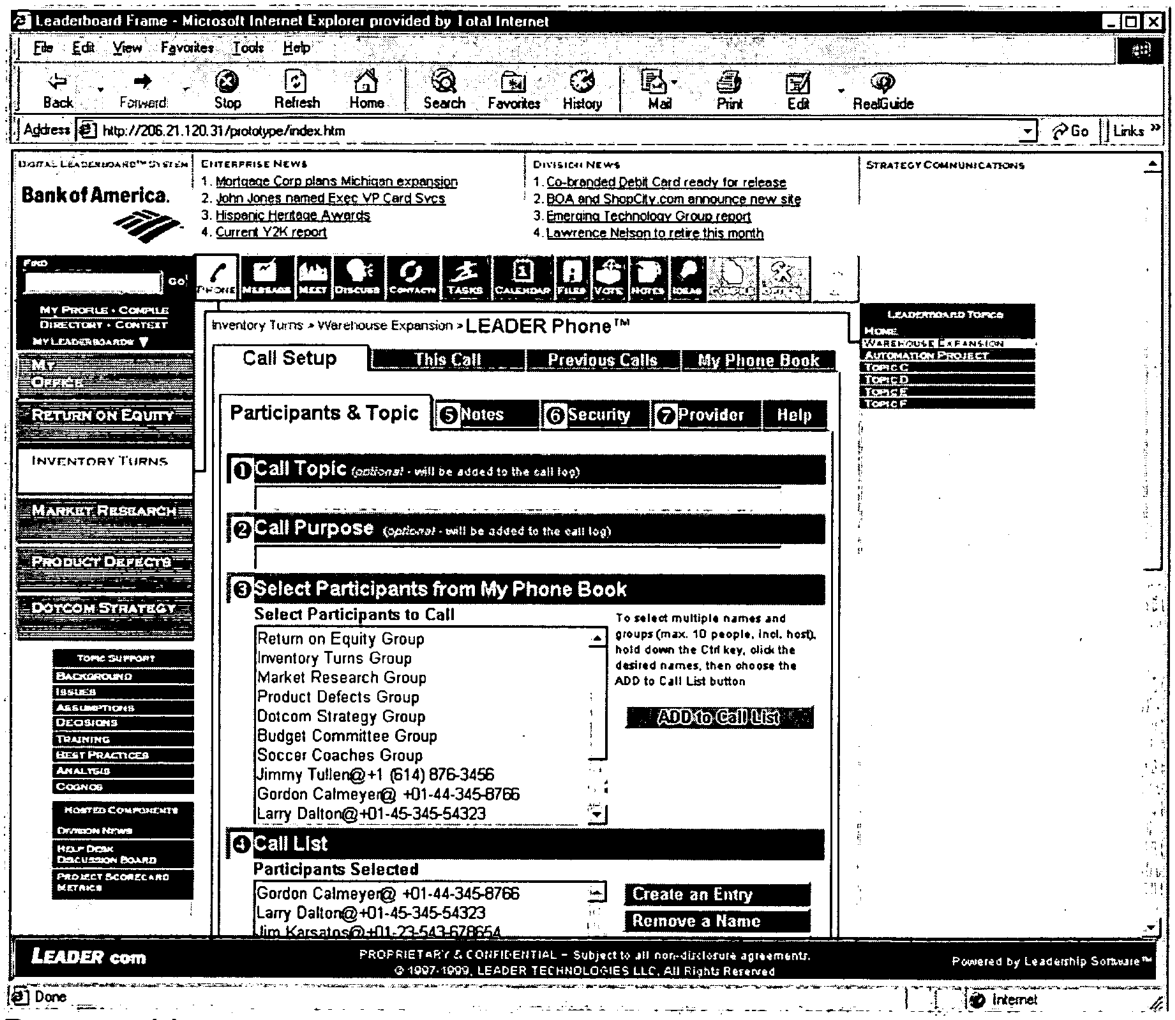
After calls have been placed, it will be possible to go back and review the call. This is available in the list of previous calls tab. Here is what that would look like:



9. Address Books

The Leaderboard System will support thousands of users. We need to make it as easy as possible to add users into telephone or address group listings. The creation of an address book will come with the creation of a Leaderboard Topic. An Address Book will exist for a Leaderboard initially based on the specific people assigned and given access to the board. If a Topic is created and four people are given access to that topic, then those four people will be listed in the address book for that topic.

For an individual address book, only one person will be assigned by default, and therefor only that one person will be listed in the address book.



Person table

There will be a variety of uses for the information contained in the person table. It will be used for telephone calls, email, fax, address listings, and probably many others. The person table will contain all the personal information on a person and it will be displayed to users of the system in ways consistent with the application need. In other words, when a user is looking for an e-mail address, they would be able to look in a view of the person table that only displays a portion of the information in the table. The same will be true of other application needs. There will be records in the persons table corresponding to employees of an enterprise and to individual people added for a personal

address book. There will be a type field in the persons table to differentiate between an enterprise employee person and an entry in a personal address book.

Access to specific data on a person will be controlled via access permissions. It will be possible to add a personal telephone number on a record, but not have it available to anyone else in the system. The specific data that will be controlled will be telephone numbers, addresses, and e-mail accounts.

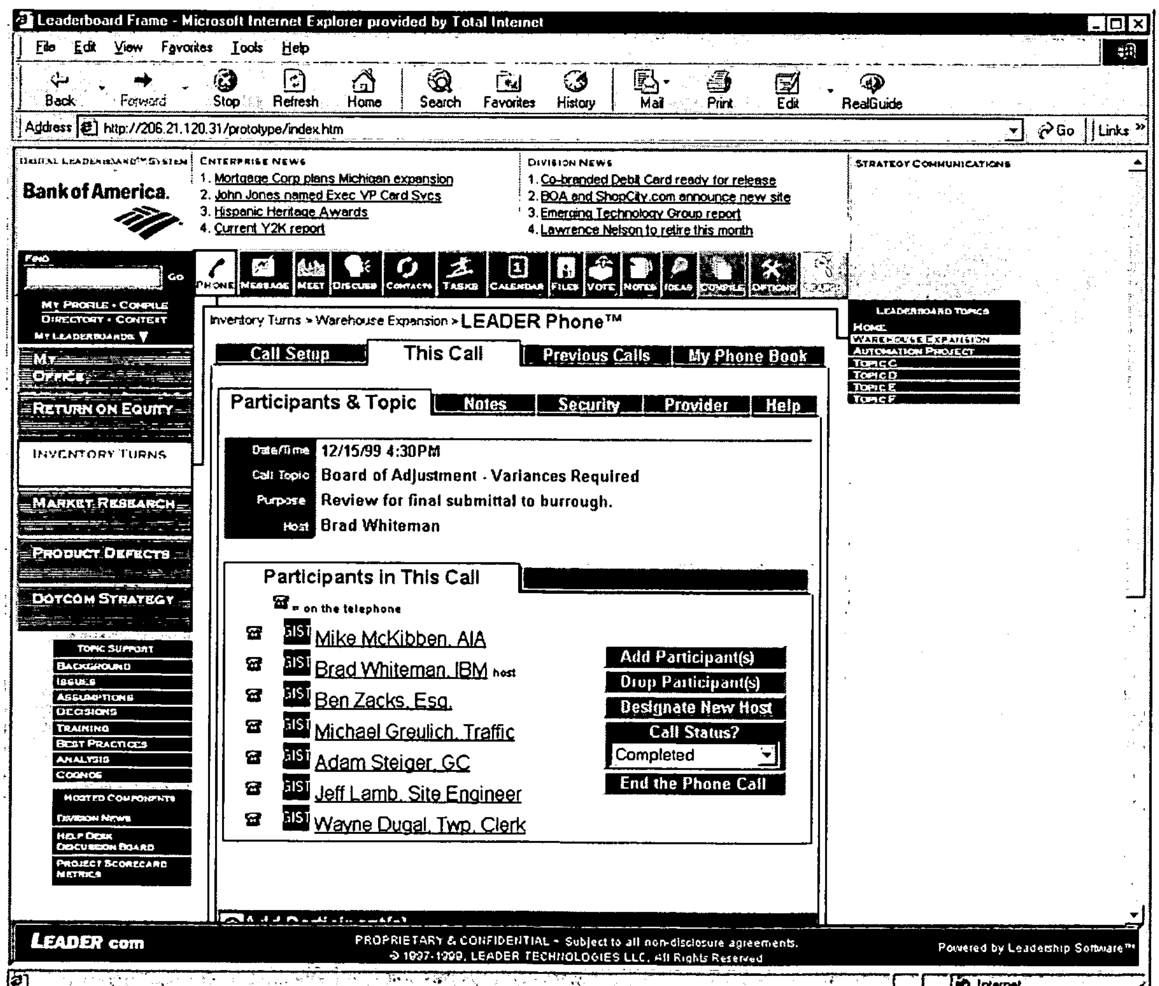
Views of the person table:

E-mail addresses in the message function
Phone numbers in the phone call
Fax in the messaging
Global list when administering a Leaderboard/Topic

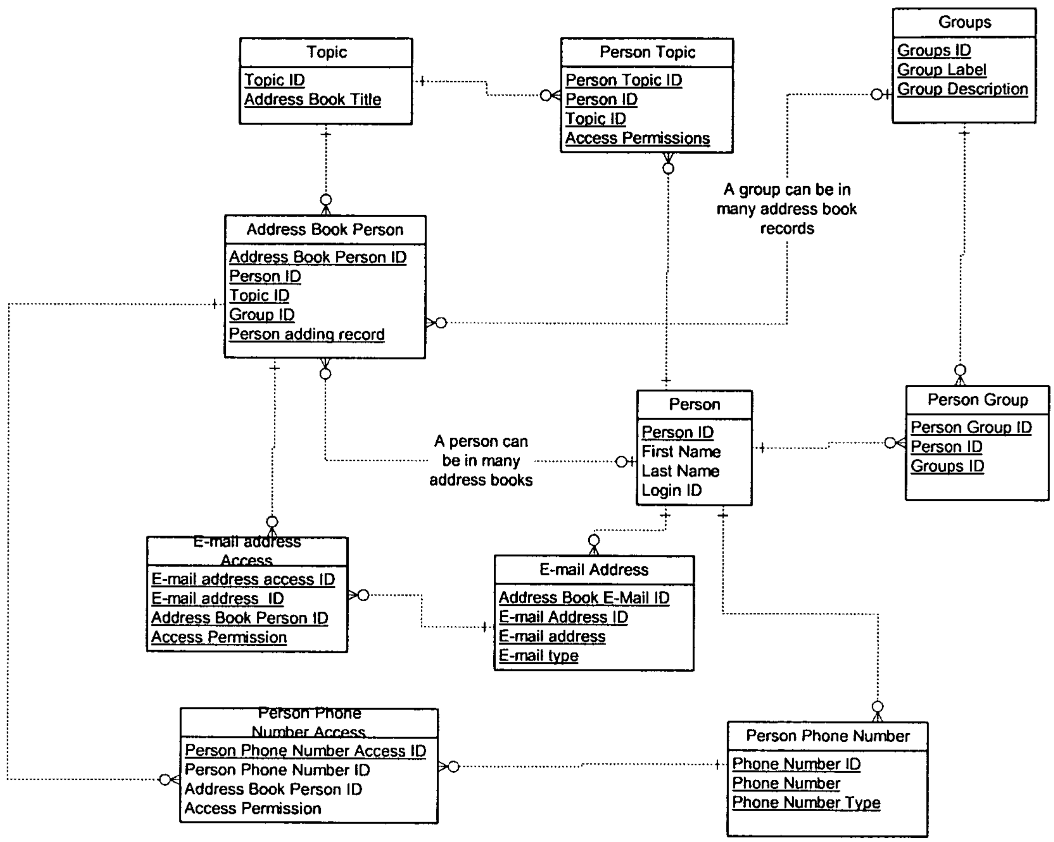
Groups

There will not only be a large number of people, but there will also be a large variety of people. It will then be important to try to group some of the users together into logical groups of people. The system will create some of the groups automatically and the user will create others manually.

The simplest group will be the entire enterprise for a company. This will be a list of all entries in the persons table. The next smaller list will be a list of all users at a particular location. This will be generated via the company location table. Each leaderboard will create a group list by default. As users are added to a Leaderboard, they will be added to the group. Therefore, if a Leaderboard were



created with five users on it, a group list will be created with the name of the Leaderboard, consisting of all the users on the board. This group list will automatically be added to the groups table and a corresponding entry will be made in the groups person table for each individual person. In any group that is automatically created by the system, the group entry will be added to the Address Book Person table. So all of the members of a group will have a group entry added for them corresponding to the group, or in this case Leaderboard. When an automatic entry is being made to an individual users address book, the individuals address book record will be checked to ensure that entry does not already exist. A record will be determined to already exist if it has the same person id and topic id as an existing record in the Person Address Book table.



There are two types of telephone listings, hereafter referred to as contact lists. There is a personal contact list and a leaderboard contact list. The listings will be treated the same for the most part because the functionality of an individual person's topic will be the same as a shared Leaderboard topic. The one difference will be in access to the particular information. Any contact added to a My Office Leaderboard will not be available to anyone else in the system. It will be considered a private entry for that person. An entry on a Leaderboard Topic on the other hand, will be shared among all the different participants on the Board Topic.

Creating your own group list

Each person will be able to group other people in the system in any number of ways. People can be grouped to make e-mail addressing or conference calling easier. In each case, a person would only have to enter the name of the group and then select all of the people to go into that group.

When using a group list, it will also be possible to deselect individual people after a group has been selected. So, if a group of 10 people was selected, but the user knew that one of the 10 was not in

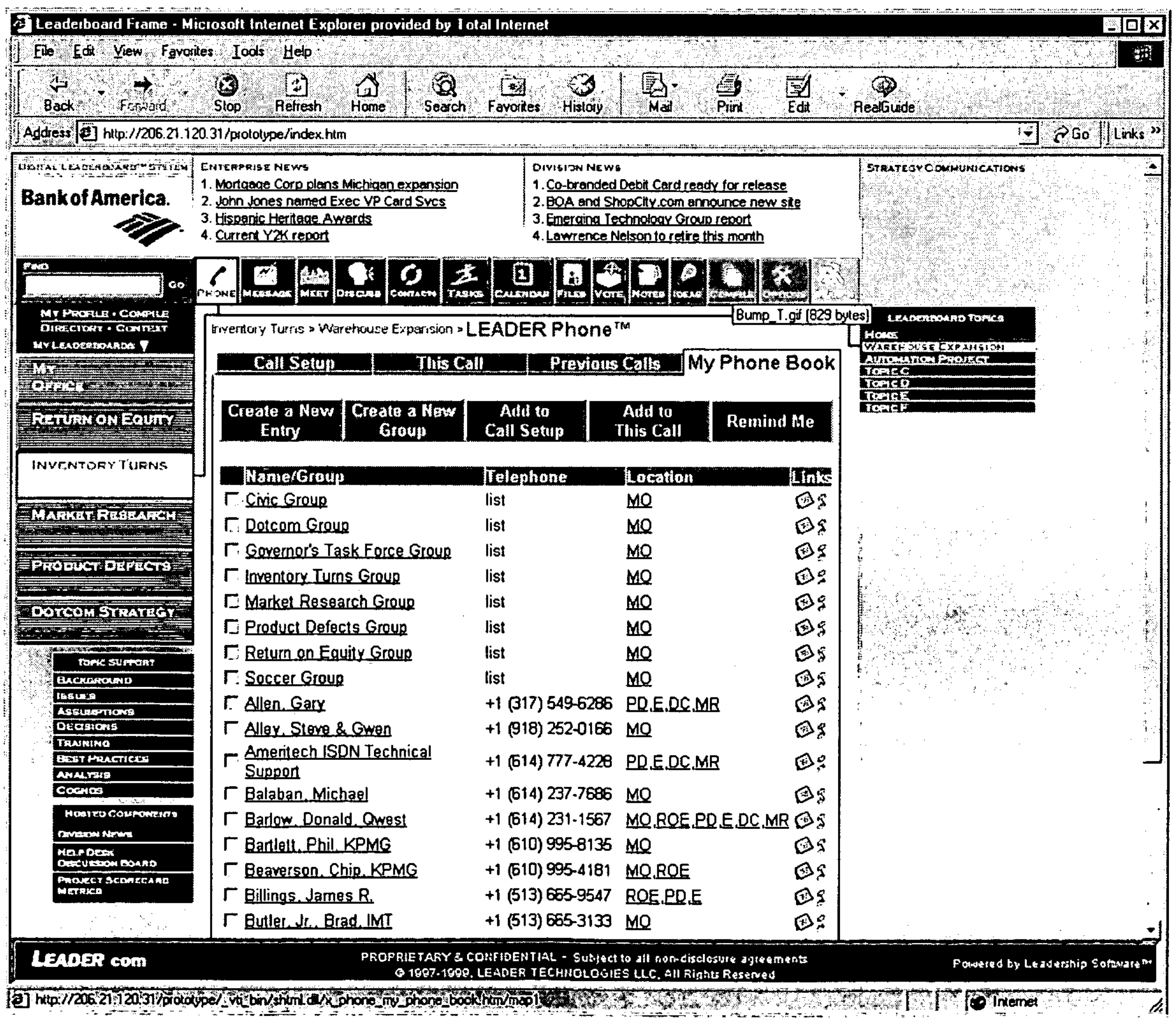
the office that day, that person could be removed for the purpose of that particular event (meeting, call, message, etc.)

Contact list

Contact lists will be available on all Leaderboard Topics. An individual Leaderboard Topic, (My Office), will list all the people in a personal address book, while a Leaderboard contact list will list all the people assigned to the Leaderboard as well as other people of interest or relevance to the Leaderboard Topic. As an example, a Leaderboard group may all work at night and they want to have the phone number and address of a local restaurant in the contact list for the Leaderboard Topic, it could be added there. By adding a contact to a Leaderboard Topic Contact List, an entry will also be in the individual contact lists for all the participants on the Board Topic. Unless an entry for that Person based on the Person ID already exists.

A personal address list is a list of all people a person has entered, either called, or e-mailed. This will create many entries in a person's address book automatically. This list can be edited or maintained on the personal leaderboard under the contacts One-touch selection.

The number of people in an enterprise makes it unwieldy to use the person table as the primary address book. Each person will then have a personal address book, which will contain people that the user has either called or sent e-mail to in the past, or someone they contact frequently. There will be a personal preference, which will allow people to decide if he or she wants to add each person called or mailed, to their personal address book. This will provide a shorter more usable listing of names and telephone numbers. There will be an option on each view of the address book to perform updates. For example, in the messaging application, it will be possible to update your address book directly. This will be true also in the telephone calling application.



Address Book Person Table

When an individual record is added for a personal address book, the Person ID of the person adding the record will be captured in the Address Book Person table. This will not be done on records added to a shared Leaderboard Topic. This will allow the system to differentiate the two types of records. The records in the Address Book Person Table will make up the Address Book for a Particular Leaderboard Topic. This means that no only will individual entries be displayed here, but group entries will too. If an entry is for a group, there will be an entry made in the group id field, otherwise there will be an entry made in the person id field.

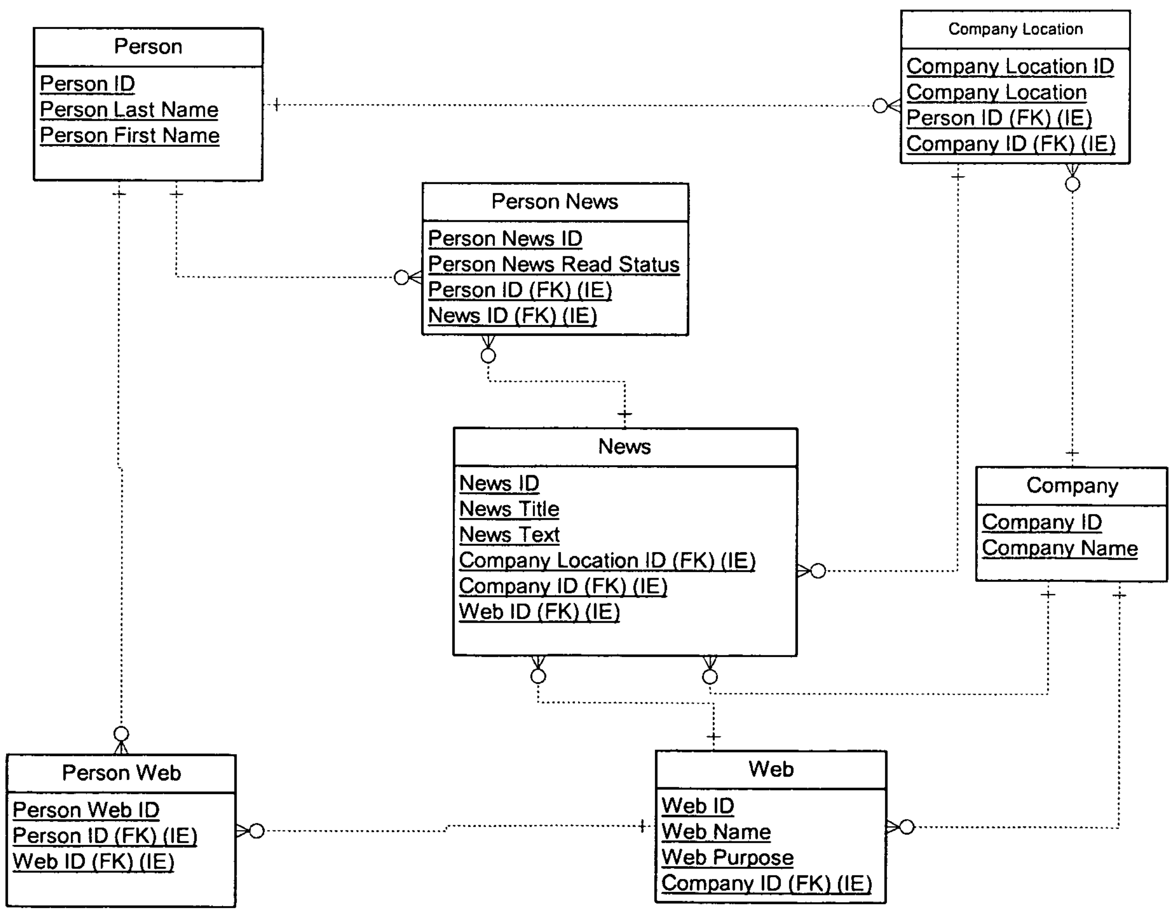
10. Company news and information

Company news is the general information that a company needs to get out to its employees. Many methods have been utilized over the years, newsletters, bulletins, intercom announcements, global e-mail and the like, but none of them have been able to adequately get the word out quickly to all the people in an organization and keep track of who has received it and who has not. The Leaderboard system will support corporate news by putting messages in the upper portion of the screen, in a prominent location for all people to read.

We need to put a lot of information on the screen with this application, so we need to be judicious with our use of screen real estate. We don't want to continue to display information to a person if they have already read it. We want to keep track of all the people and the messages they have read, so it makes sense to check to see if all the messages for a person have been read before displaying the Leaderboard screen.

Once a person has read the items, then the information is just taking up space on the screen. So we need to be able to have a preference which says the news feature will be minimized when all the items have been read. This will ensure that the information is in fact getting out to all the people while it supports the need to efficiently utilize screen space.

The news information will be stored in a table that will be linked to the company table, the company location table and the web table.

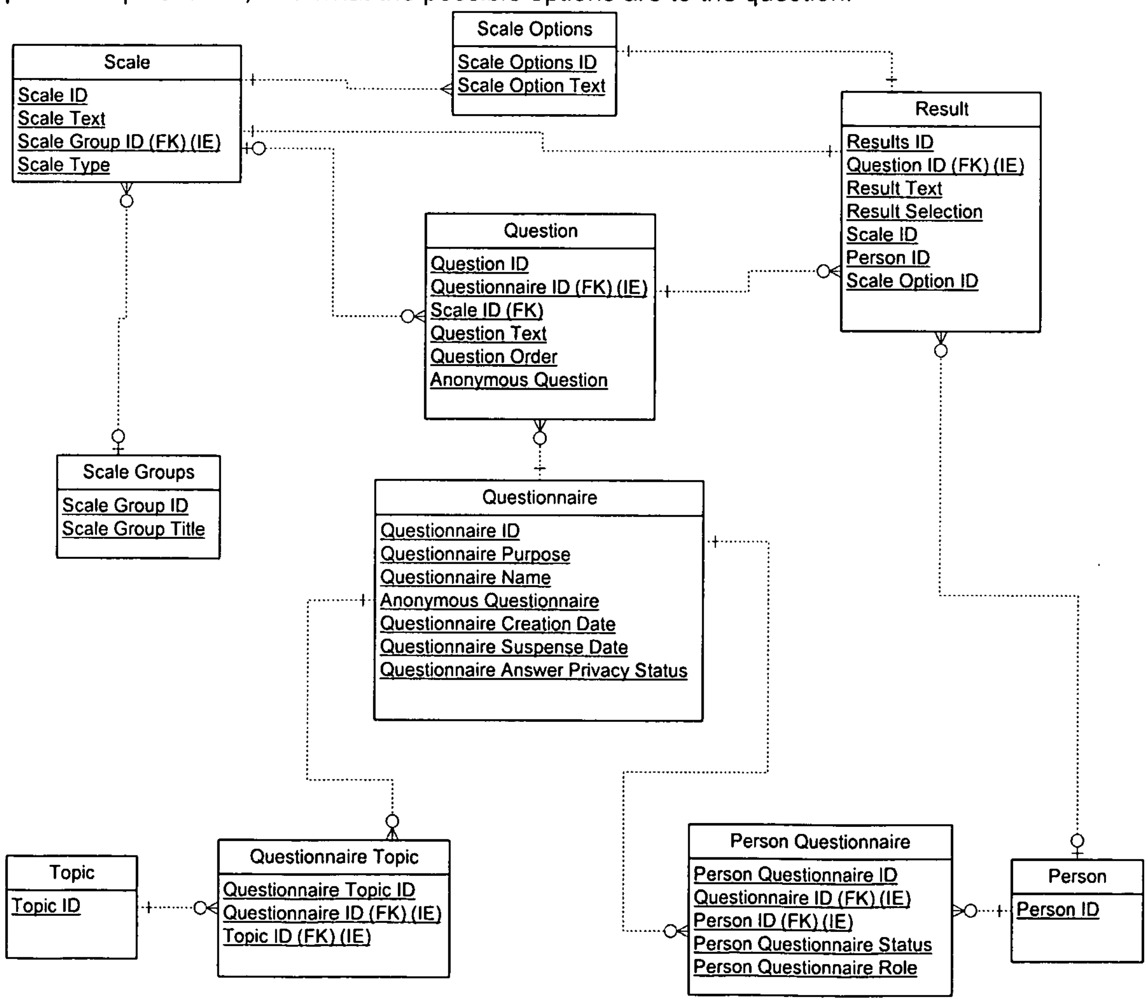


11. Voting Functionality

An important piece of functionality for a company is the ability to poll employees or coworkers to determine preferences or desires. This might be considered voting or it might be considered a questionnaire but in either case, a Leaderboard will need to support users ability to question and compile the answers from other users of the system.

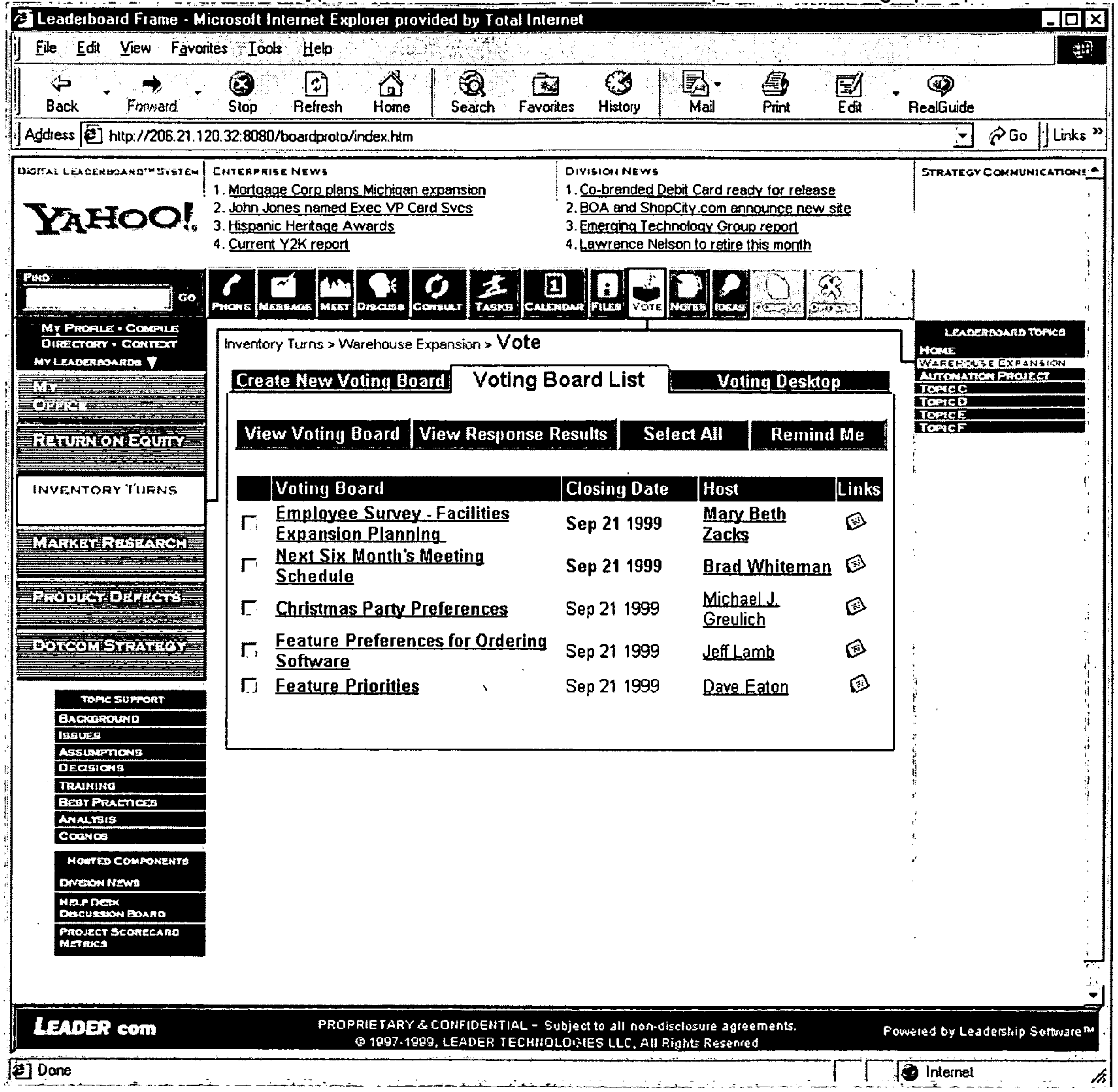
Voting

In a Leaderboard, voting is intended to be part of a process where a specific option is selected in a finite amount of time. It might be related to a decision that needs to be made by a group, selecting leaders for some particular task, or any number of other things. It will be synonymous with public elections or private voting for a particular subject or person. In the case of a Leaderboard, the person setting up the voting will need to determine what question needs to be asked, who they would like to pose the question to, and what the possible options are to the question.



Questionnaire

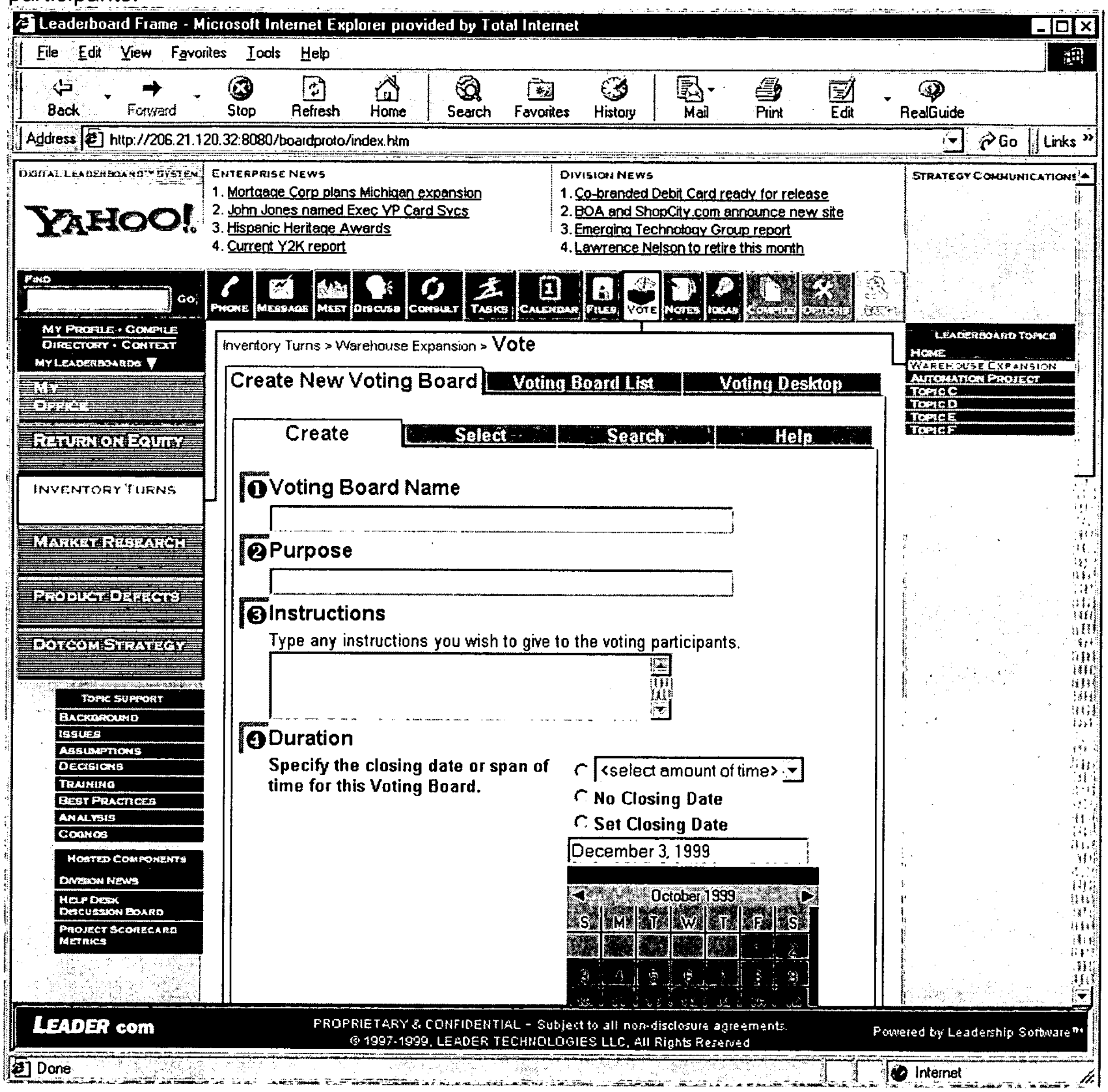
A questionnaire is a more open-ended approach for gathering information. It could be used for obtaining preferences, it might be used for demographic information, or it could be used for finding out how people feel in an organization. In any case, a questionnaire is a series of questions, which will be generated by a person with a range of responses available for each of the questions. There will be a series of different types of answers available to assist a person in setting up a questionnaire.



Workflow

A person setting up a voting form or a questionnaire, they will go through a series of steps. The first will be to determine whom they want as participants. The list of participants will initially be based on their personal address book, where they could either select everyone on a particular Leaderboard/topic or individually select the people to participate. If the questions are for a larger audience than for a single Leaderboard/Topic, it will be possible to select people from the global address book, otherwise known as the persons file. When all the people have been selected for the questions, then the specific questions have to be created. They can be of any type or form. They

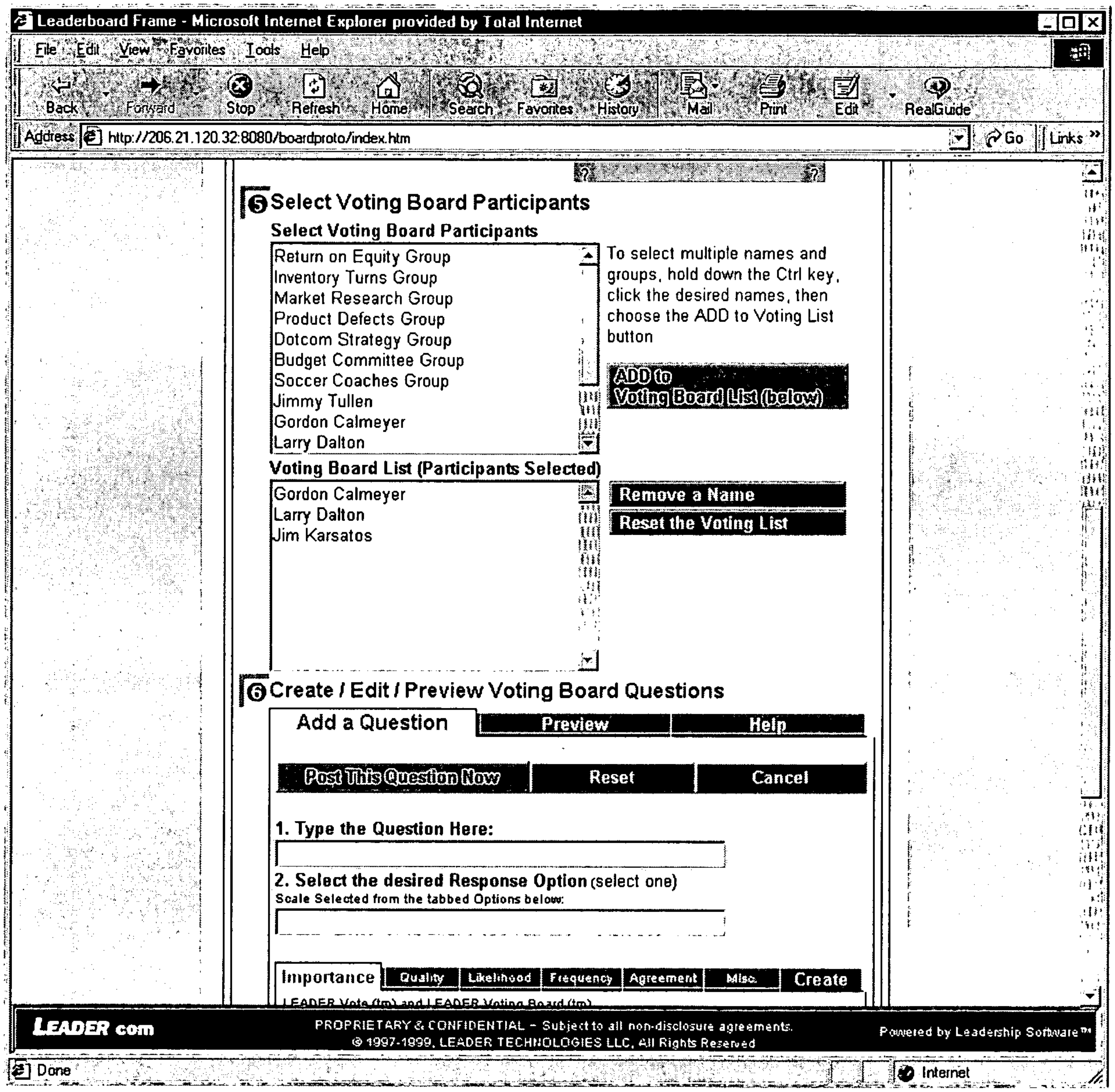
can allow for Yes or No answers, multiple choice, freeform text entry, or different scales in responses. If there are specific answers for a question, such as with an election of people, then the user will be prompted to enter all the possible answers. When the questions and answers are finished, the order of the questions will be determined. A preview of the form will be presented to the user and they can either accept it, or make changes to the content or the order of the questions. When the person is satisfied with all the information, the questionnaire or vote will be submitted and delivered to the participants.



The system will allow for setting up quick votes, which can take place during chats or on-line meetings. If a vote needs to take place in the middle of a meeting, the person requesting the vote will want to setup the vote and have it in as short a period of time as possible. A quick vote function would limit the voting functionality to only the most critical components. It would ask for the question to be posed, and the possible answers. It would go to the participating group of individuals in the meeting or chat by default.

A person would be notified that they were requested to participate in a vote, by having an icon of a voting booth appear in the upper right hand portion of the screen. This would be above the list of

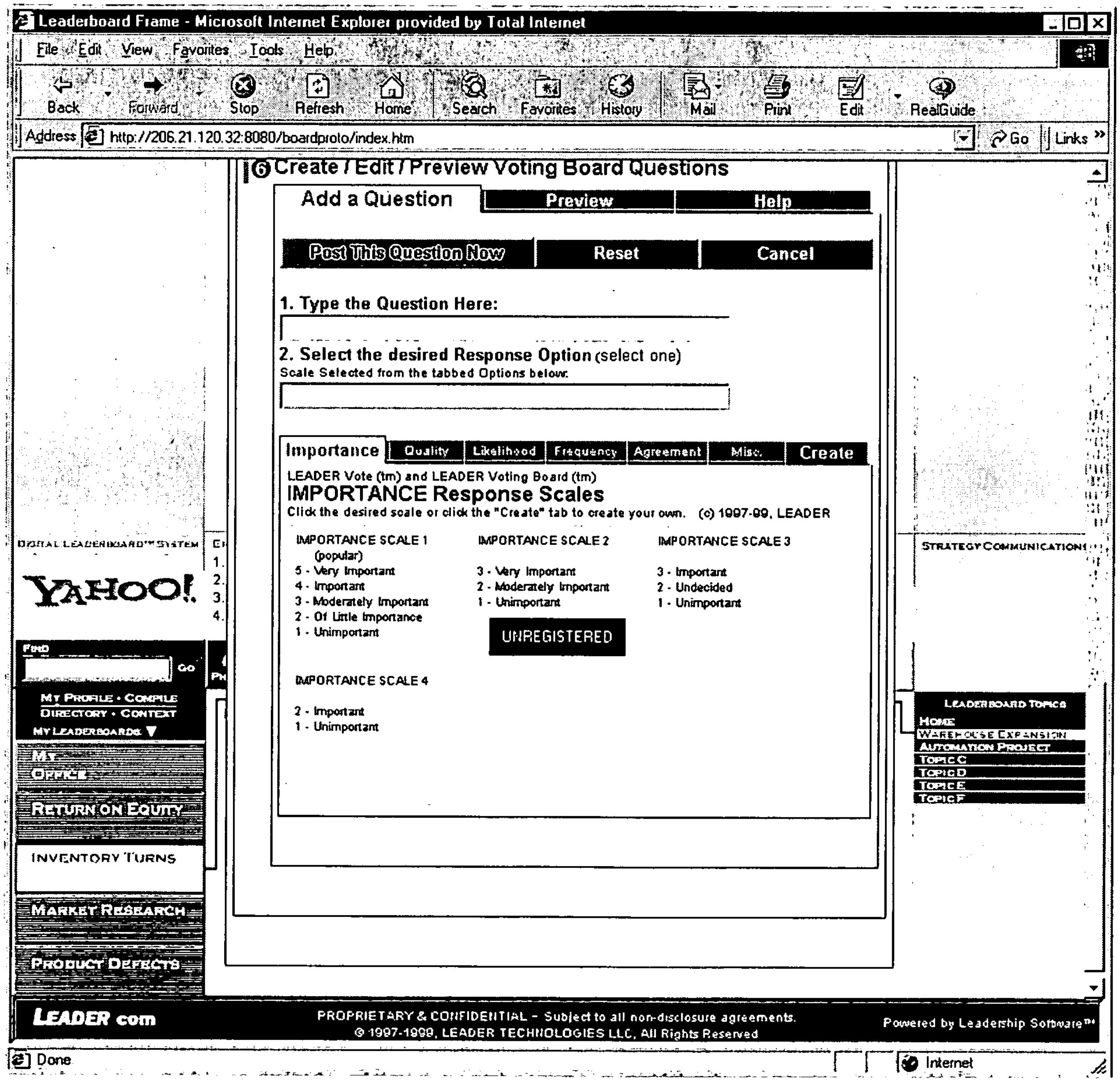
topics on a Leaderboard. When the voting booth icon appears, it would signify that a vote has been requested of that particular person. Upon selecting the Voting Booth button, the user will be taken to a list of Votes (or just one vote) that they have been requested to participate in. They will be able to select a particular vote selection and will be taken to the appropriate Leaderboard/Topic to respond to the Question. In the case of a meeting quick vote, the process would take place in a window inside the meeting.



For voting that does not occur as part of a meeting, there will be three ways to access to vote. First, the person could select the Voting Booth Icon from the primary screen. Second, the person could go to a particular Leaderboard/Topic and click on the Vote button from the One-touch toolbar. Third, the person could do a global compile, and find that they have a vote to participate in and go directly to it from there.

Scale

The scale information refers to the possible sets of answers for a question. There is a normal group of answers to questions (Yes/No, High/Medium/Low, etc.) and those scales are captured in the system so they can be reused. This will help a person create a questionnaire without having to build it all totally from scratch. There are three components to scale. The scale itself is the list of the particular scales, which are available for use. The Groups of scales are for lumping scales together into like categories so they may be easily found and selected. Scale Options, are the specific answers to the scale. Therefore, a Yes No scale might be part of a Decision-Making Scale Group and it would have two entries in the scale options, one for yes and one for no. A person will have the option of adding new scales to the database, or they could just add their own answers to a particular question. User defined scales will be identified by the type field in the scale table. The possible answers will still be recorded in the scale options table. This is important because the result table will refer back to the scale and scale option tables. It will have a reference to the scale and the scale option as a way to identify, which of the predetermined options was selected.



Anonymous Voting

It will be possible to hold anonymous votes. There will be some occasions where people using the system will not want to divulge their identity and the person creating the questionnaire will want to allow that. Therefore, when the questionnaire is created, that person will be able to select the option of allowing it to be anonymous. If it is anonymous, the questionnaire will show that on the page when a person is answering the questions. Anonymous questions will not capture a persons user id at all. So the answers to the questions will be captured, but it will not be possible to determine who answered in which manner. In every case, when a user answers a questionnaire, the status field will be changed in the Person Questionnaire table.

It will also be possible to create questionnaires where the answers are public, private, or partially private. In a public questionnaire, the answers will be available to all persons who answered the questions. This will be the default. Private questionnaires, will be ones where only the person asking the questions can see the answers, and finally, in the partially private questionnaires, the respondents can see the answers to the questions, but can not see any of the filled in text messages.

A given voting questionnaire can be any combination of these options. Therefore, it is possible to have anonymous public voting. In this case, everyone who responds will be able to see the answers but they will not be able to see who voted in which way. Conversely, it will be possible to have private voting, where the respondents names are known to the person who created the questionnaire.

EXHIBIT G

created on or before January 5, 2000

LEADERBoard Data Dictionary

Tables	Field	Description	Type	Size	Purpose
Access Codes	Access Codes	Assistant, Update, Write and Delete, Read only, Read and Write, Own, Administer,			
Access Codes	Access Codes ID	Key			The purpose of the access codes is to list the various types of access that are available in the system. The host of a particular board will be able to give other people specific access to various topics on that board.
Account Person	Account Person ID	Key	integer		The purpose of the account person table is to list the various accounts a person may have. A single person could use the system for more than one business or for personal and business reasons.
Account Person	Account Person Type	Key from account person type	integer		
Account Person	Billing Account ID	Key from billing account	integer		
Account Person	Person ID	Key from Person Table	integer		
Account Person Type	Account Person Type	In the clear person account type	char	35	This table is used to list the various types of accounts
Account Person Type	Account Person Type Code	Key	integer		
Address Book Person	Address Book Person ID	Key to Address Book	long		
Address Book Person	Group ID				
Address Book Person	Person Adding Record				
Address Book Person	Person ID				
Address Book Person	Topic ID				
Attached Note	Attached Note ID				
Attached Note	Note				
Attached Note	Note Date				
Attached Note	Person ID				
Billing Account	Billing Account Name		char	35	A billing account is the account or credit card that will be billed against.
Billing Account	Credit Card Expiration Date	Credit Card Expiration Date	Date		
Billing Account	Credit Card Name	Name on the Credit Card if different from Person's name	char	35	
Billing Account	Credit Card Number	Credit Card number the person is using	char	20	
Billing Account	Credit Card Zip		char	9	
Billing Account	Payment Type	Type of Credit Card (VISA, MasterCard, etc.)	integer		
Board	Board ID	Key			This is the listing and description of the various LEADER Boards in a system.
Board	Board Message	The message that will display when this board is selected.			
Board	Board Name	The name of the Leaderboard. This could either be assigned by the host of the Leaderboard, or it can be assigned by the Enterprise Leader Web implementer.			
Board	Logo	Button to be used for Display of Board			
Board	Purpose	What is the purpose for this Leaderboard			
Board	Status	Active, Under Contruction, In active			
Board Channel	Board Channel ID				
Board Channel	Board ID				

Board Channel	Channel ID				
Board Topic	Access Permissions				This is an intersecting entity
Board Topic	Board ID	Key from Board			
Board Topic	Board Topic ID	Key			
Board Topic	Date Created				
Board Topic	Topic ID	Key from Topic			
Calendar	Calendar Attached Note ID				
Calendar	Calendar Attachments				
Calendar	Calendar Date Created				
Calendar	Calendar Description				
Calendar	Calendar End Date-time				
Calendar	Calendar ID				
Calendar	Calendar Location				
Calendar	Calendar Percent Complete				
Calendar	Calendar Priority				
Calendar	Calendar Start Date-time				
Calendar	Calendar Status				
Calendar	Calendar Template ID				
Calendar	Calendar Title				
Calendar	Calendar Type				
Calendar Person	Calendar ID				
Calendar Person	Calendar Person ID				
Calendar Person	Calendar Person Role ID				
Calendar Person	Calendar Person Status				
Calendar Person	Person ID				
Calendar Template	Calendar ID				
Calendar Template	Calendar Template ID				
Calendar Template	Purpose				
Calendar Template	Title				
Calendar Template Items	Calendar Repeating End Date				
Calendar Template Items	Calendar Repeating Start Date				
Calendar Template Items	Calendar Repeats every				
Calendar Template Items	Calendar Repeats How Often				
Calendar Template Items	Calendar Template End Time				
Calendar Template Items	Calendar Template Item ID				
Calendar Template Items	Calendar Template Start Time				
Calendar Template Items	Calendar Title				
Calendar Template Items	Description of Calendar Item				
Calendar Template Items	Location of Calendar Item				
Calendar Template Items	Template Item ID				
Calendar Template Items	Type of Calendar Item				
Calendar Topic	Calendar ID				
Calendar Topic	Calendar Topic ID				
Calendar Topic	Topic ID				

Call Detail	Call Detail ID		integer		The call detail is the setup information for a conference call.
Call Detail	Call id	Key to the calls header table	integer		
Call Detail	Phone Action	A = Add to conference, D = Disconnect from Conference, M = Mute, H = Hold, S = Status, R = Resume, X = Not in Use	char	1	
Call Detail	Phone Number	Phone Number for the host	char	20	
Call Header	Action	Setup, Status, Change, Cancel		5	The call header is used to keep track of the various different people and phone numbers that were on a particular call.
Call Header	Billing Zipcode	Numeric. Only when credit card.		5	
Call Header	Call id	Key to the calls header table	integer		
Call Header	Call type	Taskd Call, Completed Call, Cancelled Call (Lookup table)	integer		
Call Header	Conference Call ID	Numeric		20	
Call Header	Credit Card/Account	Numeric		16	
Call Header	Expiration Date	Numeric. YYMM format, Only when CreditCard		4	
Call Header	Greeting Number	0 = default, 1-9 - user defined greetings, 99 = new greeting	char	2	
Call Header	Host Phone Number		char	20	
Call Header	Save Greeting Flag	Y, N	char	1	
Call Header	Save Greeting Name	Only when save greeting flag = 'Y'	char	20	
Call Header	Task When Flag	N, F	char	1	
Call Header	Taskd Date	CCYYMMDD		8	
Call Header	Taskd Length	In seconds 15 minute (900 seconds) increments		5	
Call Header	Taskd Time	HHMM military		4	
Call Header	Validate Called Party.	Y or N. When 'Y' will ask called parties to press 1 to verify their identity.	char	1	
Channel	Channel ID				
Channel	Channel Name				
Channel	Channel Purpose				
Channel Content	Channel Content ID				
Channel Content	Channel Content Text				
Channel Content	Channel Content Title				
Channel Content	Chennel ID				
Company	Address				This is the company or enterprise
Company	Address Line 2				
Company	City				
Company	Company ID	Key			
Company	Company Link				
Company	Company Logo				
Company	Company Message				
Company	Company Name				
Company	Postal Code				
Company	State				

Company Location	Address				This is a table to capture the various locations a company may be operating in.
Company Location	City				
Company Location	Company ID	Key from Company			
Company Location	Company Location ID	Key			
Company Location	Logo	If different from Company Logo			
Company Location	Organization Name				
Company Location	State				
Company Location	Zip				
Discussion	Discussion Thread Title				
Discussion	Discussion ID	Key			
Discussion	Discussion Purpose				
Discussion Note	Attached Note ID				
Discussion Note	Discussion Note Author				
Discussion Note	Discussion Note Date-Time				
Discussion Note	Discussion Note ID				
Discussion Note	Discussion Note Subject Line				
Discussion Note	Discussion Note Text				
Discussion Note	Discussion Topic ID				
Discussion Note Relationship	Discussion Note ID				
Discussion Note Relationship	Discussion Note Relationship ID				
Discussion Note Relationship	Previous in Thread				
Discussion Topic	Discussion ID	Key from Discussion			This is an intersecting entity
Discussion Topic	Discussion Topic ID	Key			
Discussion Topic	Topic ID	Key from Topic			
E-mail address	E-mail address				
E-mail address	E-mail address ID				
E-mail address	E-mail type				
E-mail address	Person ID				
E-mail address	E-mail address				
E-mail address	E-mail Address ID				
E-mail address	E-mail type				
E-mail address	Person ID				
E-Mail Address Access	Access Permission				
E-Mail Address Access	Address Book Person ID				
E-Mail Address Access	E-mail address access ID				
E-Mail Address Access	E-mail address ID				
File Topic	File ID	Key from Files			This is an intersecting entity
File Topic	File Topic ID	Key			
File Topic	Topic ID	Key from Topic			
Files	Attached Note ID	Key from Attached Note			
Files	File Description				A file is a file that is attached or associated with a LEADER Board. This is generally a binary file.
Files	File size				

Files	Files Location				
Files	Files Storage Name				
Files	CRC				
Files	File Date				
Files	File ID	Key			
Files	File Original name				
General Information	Description	Describes the information in the general information			
General Information	General Information ID	Key			This table is used to contain information of a general nature about topics on Leaderboards.
General Information	General Information ID	Key			The table will contain a series of records which will contain information about a Topic on a Leaderboard. For example, it could contain decisions, issues, risks, resources, background, assumptions, or any other subject the users would like
General Information	Name	Name for General information label			
General Information	Text				
General Information	text	in the clear text for the general information			
General Information	Topic ID	Key from Topic			
General Information	Type of General Information				
General Information	Logo	button to be used for general information			
General Information Types	Description	List the various types of general information which will be used in a pick list to set up the general information table			
General Information Types	General Information Types ID				
Groups	Group Description	Description of the Group			
Groups	Group id	Key to Group Table	long		A group is a group of persons in an address book.
Groups	Group Label	Label that is used for the group	char	30	
Groups	Group Owner	Person id of the owner of the group	integer		
Idea Registry	Idea Date stamp				The idea registry is a location to store ideas so they can be time stamped and claimed by a particular person.
Idea Registry	Idea Description				
Idea Registry	Idea ID	Key			
Idea Registry	Key Concept (category)				
Idea Registry	Status	Active, Rescinded, Private			
Message	Message Date				
Message	Message ID	Key			
Message	Message Subject				
Message	Message text				
Message	Size				
Message Topic	Attached Note ID				
Message Topic	Message ID	Key from Message			This is an intersecting entity
Message Topic	Message Status				
Message Topic	Message Topic ID	Key			
Message Topic	Message Type				

Message Topic	Topic ID	Key from Topic			
News	Company ID				
News	Company Location ID				
News	News ID				This is where the general company or organization news information is stored.
News	News Text	The actual text of the news message.			
News	News Title	The title that will display on the page			
Payment Type	Card Description	In the clear description of card (Visa, Mastercard, Discover, etc.)	char	20	Payment Type
Payment Type	Payment Type	Key	integer		
Person	Address	A persons address	Char	25	This is an individual user of the system or a person in an organization.
Person	City	A person's city	Char	20	
Person	Company Location ID				
Person	First Name	A person's first Name	Char	15	
Person	Last Name	A person's last name	Char	20	
Person	List in Directory	Does the person wish to be included in the Member directory. This could be either a series of single fields or a separate table with User Preferences	Boolean	1	
Person	Password	Login Password			
Person	Person id	Key to the Persons Table	integer		
Person	Postal	A person's Zip code	Char	9	
Person	State	A person's state	Char	2	
Person Board	Board ID	Key from Board			This is an intersecting entity
Person Board	Person Board ID	Key			
Person Board	Person ID	Key from Person Table			
Person Channel	Channel Access				
Person Channel	Channel ID				
Person Channel	Person Channel ID				
Person Channel	Person ID				
Person Discussion	Attached Note ID				
Person Discussion	Discussion Topic ID				
Person Discussion	Person Discussion Topic ID				
Person Discussion	Person ID				
Person Discussion	Read Designator				
Person Discussion Note	Discussion Note Read Indicator				
Person Discussion Note	Discussion Topic ID				
Person Discussion Note	Person Discussion Topic ID				
Person Discussion Note	Person ID				
Person File	Access Permissions	Can be changed from the default in Person Topic			
Person File	Document ID	Key from Documents			
Person File	Person File ID	Key			
Person File	Person ID	Key from Person Table			

Person Group	Group ID				
Person Group	Person Group ID				
Person Group	Person ID				
Person Idea	Idea ID	Key from Ideas			This is an intersecting entity
Person Idea	Person ID	Key from Person Table			
Person Idea	Person Idea ID	Key			
Person Idea	Persons Role with Idea	Originator, enhancer, assist, etc.			
Person Message	Attached Note ID				
Person Message	Message ID				
Person Message	Message Status				
Person Message	Message Type				
Person Message	Person ID				
Person Message	Person Message ID				
Person Message	Read Designator				
Person Message Topic	Message Topic ID	Key in Message Topic			
Person Message Topic	Person ID	Key in Person			
Person Message Topic	Person Message Topic ID	Key			
Person Message Topic	Read Designator	Indicates whether a person has read a message in a group Leaderboard			
Person News	Display Location				
Person News	News ID	Key from News			This is an intersecting entity. It is primarily used to see if the news messages are being read or not.
Person News	Person ID	Key from Persons			
Person News	Person News ID	Key			
Person News	Person News Read Status	Y or N, whether the news message has been read or not.			
Person Phone	Person id	Key from Person Table	integer		Person Phone
Person Phone	Person phone id	Key to persons phone	long		
Person Phone	Phone Number ID	Key from Phone Number	integer		
Person Phone Number	Person Phone Number				
Person Phone Number	Person Phone Number ID				
Person Phone Number	Person Phone Number Type				
Person Phone Number Access	Access Permission				
Person Phone Number Access	Address Book Person ID				
Person Phone Number Access	Person Phone Number Access ID				
Person Phone Number Access	Person Phone Number ID				
Person Questionnaire	Person ID				
Person Questionnaire	Person Questionnaire ID				
Person Questionnaire	Person Questionnaire Role				
Person Questionnaire	Person Questionnaire Status				
Person Questionnaire	Questionnaire ID				
Person Topic	Access Permissions	These are the default access permissions for a Person on a topic on a Leaderboard			
Person Topic	Person ID	Key from Person Table			This is an intersecting entity
Person Topic	Person Topic ID	Key			

Person Topic	Topic ID	Key from Topic			
Personal Profile	Display Options				Personal profile will contain all the preferences for the users.
Personal Profile	Navigation Options				
Personal Profile	Personal Profile ID				
Phone Number	Phone Number	Phone number for the person in the address book	char	20	Phone Number
Phone Number	Phone Number ID	Key	integer		
Phone Number	Phone Type	Type of Phone Number (Home, Office, Temporary, Mobile, etc.)	integer		
Phone Type	Phone Type	Key to type of phone	integer		Phone Type
Phone Type	Phone Type Description	In the clear phone number descriptions (Home, Office, Temporary, Mobile, etc.)	char	20	
Question	Anonymous Question				
Question	Question ID				
Question	Question Order				
Question	Question Text				
Question	Questionnaire ID				
Question	Scale ID				
Questionnaire	Anonymous Questionnaire				
Questionnaire	Questionnaire Answer Privacy Status				
Questionnaire	Questionnaire Creation Date				
Questionnaire	Questionnaire ID				
Questionnaire	Questionnaire Name				
Questionnaire	Questionnaire Purpose				
Questionnaire	Questionnaire Suspense Date				
Questionnaire Topic	Questionnaire ID				
Questionnaire Topic	Questionnaire Topic ID				
Questionnaire Topic	Topic ID				
Result	Person ID				
Result	Question ID				
Result	Result ID				
Result	Result Selection				
Result	Result Text				
Result	Scale ID				
Result	Scale Option ID				
Role	Role	Assigned, Host, Attendee, Auditor, Member,			
Role	Role ID	Key			
Scale	Scale Group ID				
Scale	Scale ID				
Scale	Scale Text				
Scale	Scale Type				
Scale Groups	Scale Group ID				
Scale Groups	Scale Group Title				

Scale Options	Scale Options ID				
Scale Options	Scale Options Text				
Task	Attached Note ID	Key from Attached Note			
Task	Task Attachments				
Task	Task Date Created				
Task	Task Description				
Task	Task End Date/time				
Task	Task ID	Key			A Task is used for any of the various types of calendar events. This could be a meeting, a Task event like a holiday, a call, or a to-do.
Task	Task Location				
Task	Task Percent Complete				
Task	Task Priority				
Task	Task Start Date/Time				
Task	Task Status				
Task	Task Title				
Task	Task Type	Event, meeting, task,			
Task	Template Task ID	Does the occurance happen more than one time			
Task Call	Call ID	Key from call			This is an intersecting entity
Task Call	Task Call ID	Key			
Task Call	Task ID	Key from Task			
Task Discussion	Discussion ID	Key from Discussion			This is an intersecting entity
Task Discussion	Task Discussion ID	Key			
Task Discussion	Task ID	Key from Task			
Task Files	Files ID	Key from Files			This is an intersecting entity
Task Files	Task Files ID	Key			
Task Files	Task ID	Key from Task			
Task Person	Person ID	Key from Person Table			This is an intersecting entity
Task Person	Role ID	Key from Role			
Task Person	Task ID	Key from Task			
Task Person	Task Person ID	Key			
Task Person	Task Person Status				
Task Template	Task ID				
Task Template	Task Template ID				
Task Template	Task Template Purpose				
Task Template	Task Template Title				
Task Template Items	Description of Task Item				
Task Template Items	Location of Task Item				
Task Template Items	Task Repeating End Date				
Task Template Items	Task Repeating Start Date				
Task Template Items	Task Repeats every				
Task Template Items	Task Repeats How Often				
Task Template Items	Task Template End Time				
Task Template Items	Task Template Item ID				

Task Template Items	Task Template Start Time				
Task Template Items	Task Title				
Task Template Items	Template Item ID				
Task Template Items	Type of Task Item				
Task Topic	Task ID	Key from Task			This is an intersecting entity
Task Topic	Task Topic ID	Key			
Task Topic	Topic ID	Key from Topic			
Topic	Date Created				This table will contain the topics used on the LEADER boards
Topic	Date Topic Created				
Topic	Topic Address Book Title				
Topic	Topic ID	Key			
Topic	Topic Title				
Topic Message	Message ID	Key from Message			Topic Message is an intersecting entity
Topic Message	Topic ID	Key from Topic			
Topic Message	Topic Message ID	Key			
Web	Web Description				The web table will contain the relationships of the Boards to each other. In other words, if a group of boards represent a hierarchial structure that information would be contained here.
Web	Web ID	Key			
Web	Web Name				
Web	Web Type				
Web	Company ID				
Web Board	Board ID	Key from Board			This is an intersecting entity
Web Board	Web Board ID	Key			
Web Board	Web Board Type Code				
Web Board	Web ID	Key from Web			
Web Board Relationship	Related Web Board ID				
Web Board Relationship	Web Board ID				
Web Board Relationship	Web Board Relationship ID				
Web Board Relationship	Web Board Relationship Type				
Web Board Type	Web Board Type Code				
Web Board Type	Web Board Type ID				
Web Board Type	Web Board Type Name				
Web Topic	Topic ID	Key from Topic			This is an intersecting entity
Web Topic	Web ID	Key from Web			
Web Topic	Web Topic ID	Key			

EXHIBIT H

created on or before January 20, 2000 through April 13, 2000

LEADER Project Functional Specification

Draft Version 2.2

1. Overview of Leaderboard

Digital Leaderboard™ is the focal point technology of Leadership Software™. Leadership Software™ is a new class of software supplying Leadership Software Services™ - web-based application software that coordinates leadership collaboration across enterprise Intranet and Internet.

2. Background

Computer technology has failed to address the needs of leadership. Information workflow and leadership workflows coexist in organizations, but it is information workflow that has received the bulk of attention and successful automation with regard to technology. With the advent of a commercially viable Internet, the browser, and the settling of the desktop wars on Windows, leadership workflow can be addressed successfully for the first time in the history of modern technology. Leadership communications is a dynamic blend of factual and intuitive elements. Computers are able to deliver the factual portions efficiently, but do little to enhance the intuitive ones. Part of this problem occurs because the approach to automation support for these functions has been wrong. The focus was on replacing human intuition algorithmically rather than on incorporating human intuition as the central component and bringing automation tools up alongside this uniquely human ability. Human relationships and communications are the most universal "commodities" of exchange with regard to intuitive decision making, not data. Data helps, for sure, but it is relationships of among people, projects and information that hold the key to Digital Leaderboard™ design.

3. General functionality

3.1. LEADER One-Touch

This is not a selectable option from any menu, but rather is consistent and shared functionality of a Leaderboard.

The expectation for the one-touch system is to be able to relate different pieces of information together, in the database file, just by using it in the system. In other words, just by using an e-mail message, that message would be associated with you (the person who touched it), the person it came from, it would be associated with the subject, or a new subject could be created. The intent is to automatically have information related to each other as it makes sense based on the way it is used in the system. The database structure will support multiple different kinds of relationships, which will allow for this functionality. What we are doing is 'helping" the users of the system by creating the links for the data and not making them do it.

We recognize that the more we ask the user to do, the more we will be at risk of the system not delivering what we would like it to. So we need to figure out ways to get information and subjects together automatically. Getting people and information should be easy. Any time anyone touches some information they are associated with it. But getting the subjects and the information together will be a little trickier. What we have to do is have a Leaderboard opened and then allow information to be associated with it. In other words in a Leaderboard on Product Development there would be multiple products listed. If there was a word document created about one of the products it would be uploaded to the board and made available for everyone. This way, the person does not have to put a categorization on the file (nor have to agree with the categorizations of the group), but rather just upload the file to the board and it will be related to the subject it is loaded to and the person who loaded it.

In all cases, any possible relationships which can be made by a user accessing a file, needs to be made.

3.2. Remote Procedure Calls

Remote procedure calls in the database will be used where feasible or possible. This will limit the amount of processing that the client (browser) machine will have to process via Java applets, or that that the web server will have to process. If there are repeatable functions that the database has to perform, a database procedure will be written and all developers will be notified that the procedure is available.

3.3. Modular design

Each component on the Leaderboard will be modular in that it will be able to stand on it's own as an application and will not require any of the other components to operate. It is not expected that any of the components will be used separately, but the modularity will allow for incremental testing and deployment. This modular design will also provide a standard interface with the HTML screens. Each of the component modules will be callable via a series of parameters depending on how it will operate with other components. For example, the schedule will be called with no parameters and it would call the default schedule with the current date. If it is called with a specific date it will display that date first and if it is called with a specific appointment or meeting, it will jump to that specific meeting. Each of the modules will support this parameter based calling feature.

3.4. No plug-ins

The system will not require additional plug-ins to operate. It will be created with HTML and Java and will not require additional software of any kind to operate.

3.5. Multi-lingual

This application will have to support customers working in multiple languages. In other words, workers may not all be located in the same company, and we would like for the various workers to be able to communicate (at least on the written portions of the boards) in their native languages and let the application do the translations.

3.6. Types of Leaderboards

The information that will be saved and stored on a Leaderboard is virtually limitless. However, there will be a number of types of Leaderboards created by default for an organization. The first Leaderboard that will be created for a company will be a company board. The primary purpose of this board is to support news and information content getting out to all employees of the company. If the company has more than one location, then there will also be leaderboards for every location the company has employees at. Other types of Leaderboards could be created to get information to other people. A channel is a type of board that helps get information to groups of people. Channels are discussed further in section 22.

It is possible that a Company or Company location Leaderboard could also be an interactive board and not one just used for company news. Each Leaderboard will have an option that will signify the type of board it is. Different types are:

1. Leaderboard
2. Subscription Leaderboard
3. Channel
4. News Leaderboard
5. Company Leaderboard
6. Company Location Leaderboard

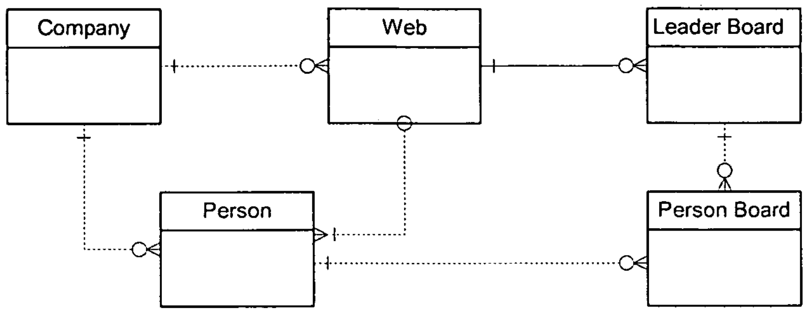
LEADER Project Functional Specification

Draft Version 2.2

4. Organization

The organization of Leaderboards within a company is very similar to the relationships between all of the pieces of data in a Leaderboard. What this means, is that a Leaderboard can have a relationship with one, or many other, Leaderboards, the relationship is not mandatory, and the people who have access to the board are not limited to any particular organization in a company.

The following diagram reflects this relationship:



What this means is that a company can have Webs of Leaderboards. A Web is defined by the management of a particular company. Some companies may want to implement Leaderboards as stand alone entities and so they may not wish to use Webs, but others will try to take advantage of the unique structure of Leaderboards and create groups of boards for particular purposes. Leader, will not know how any particular company will want to use the system, so it will have to be flexible and intuitive enough to support the variety of organizational methods.

The webs will also most likely be a reflection of the management structure of a company. So, if a company has a hierarchical structure, their Webs will reflect a similar structure, but if a company is more into teams and workgroups, then the Web structure will be more free form and dynamic. This is not to imply that one structure is better than another, that is best left to the business analysts, rather that the system has to be able to support multiple management structures. It is also possible that the structures used by a company will change over time. That is why it is so important that these relationships be defined in a database and not written into application code.

5. LEADER Desktop

The LEADER Desktop is the look and feel of the interface for the user. It provides the user with a way to interact with the various components of the Leaderboard. The desktop will be broken into 3 distinct areas. The top area is for static information. If the board is run for a particular company, their logo will be placed here, as will general information about the company. This area will be controlled and administered by the companies designated administrator (See System Administration below). The information in this top portion of the desktop will be stored in a database file, so it can be dynamically changed. In other words, while the company logo may appear on the company Leaderboard, a different logo may appear on a different Leaderboard. As a board is selected, it will load preferences for this top area. In non-company specific versions the LEADER Technologies Logo will be placed here and advertisements will alternate in this space.

The lower part of this space will be the primary desktop menu. This menu will contain all the standard functions, which are available on every Leaderboard. By clicking on any of these options, the main work area will be changed to the specific one the user selected. The options available are: Phone, messages, meeting, discussions, consulting, tasks, calendar, files, vote, notes, ideas, compile, options, and searching.

Each of these selections will be discussed in the following sections.

In the area on the left hand, side of the screen will be the section for displaying or selecting the particular Leaderboard to use. A person may have access to one or many different Leaderboards. If a company decides, each person could be provided with a personal Leaderboard, which will be called "Person's Name Office". They may also have access to many additional Leaderboards depending on their position in the company and the desires of the people running the particular Boards. For a more complete explanation of security and Leaderboard access, see the Security section.

When a user selects a Leaderboard to work with, the work area will reflect the information from that board. The tools options on the top will remain the same, as will the various Boards a person can access.

The main workspace on the desktop will be where the requested information will display. For example, if a person selects their personal office and calendar, their personal calendar will appear. While, if they choose a particular Leaderboard and Discuss, they will be placed in the discussion function for that particular board.

The purpose of the desktop is to provide a common appearance and function for each of the various tools a person has, as well as the various boards a person may have access to.

There will be different desktop motifs, which will allow a user to customize the look and feel of their desktop without affecting the functionality. Basically, the motifs will only affect the appearance of the screen, and all the desktops will offer the same functions. Additional motifs can be added in future versions of the application.

When a person first accesses the system, a series of different files will be accessed and read. Information from those tables will be used to build the initial Leaderboard screen. The first table will be the Person Table. This table has the person's login and password information. When a person has been authenticated, additional files will be used to build different portions of the screen.

Person Board

This table will contain all the Leaderboards a person can access. There will always be one Leaderboard listed and that will be the personal office board. *We need to add a field to this table to indicate which board is the personal office board. We also need to add a field to denote the display order for the various boards.* The default display order will be Personal Office first, and then the other boards in Alphabetical order. A person will be able to select

	to change the order of the boards as they display on the screen.
Person News	Company news and company location news will be displayed in the top space of the screen. Person News will contain a field called display location that will denote the space in the top of the screen display where the news item will be displayed. Company news will be displayed in the first location and company location news will be in the second. The Person News table will also have a read indicator, so if a person selects, they do not have to display any news items they have read. So, for a person who has chosen to hide read news items, the system will look for any items in display location 1 which have not been read, and then look for any items in display location 2 which have not been read. The Person News table will contain a field that has the title of the news item so no other tables will have to be read to display the news items on the screen. When the user selects to read the item, then the news table will be accessed.
Personal Preferences	Personal preferences are where the various switch and indicators will be that reflect the way a person would like the screen to look and interact. Some of the switches are: • Start at Last Accessed Leaderboard • Display Read News Items • Display Read Channel Items • Display all Leaderboards or just those with access privileges Other switches will be listed as they are defined.
Person Channel	The Person Channel table will work much the same as the Person News table. It will contain all the information about different channels that are available for a person. Therefore, an entry in the person channel will indicate that a person has access to a particular channel and then all the titles of the items in the Channel content for that particular channel will be listed.

Based on a person's preferences, the tables that contain the content of the leaderboard will also be read. The default display will be of the person's Office Leaderboard. However, if they select the option to be returned to the board they were on last, that information will be used.

5.1. Options for Displaying Leaderboards

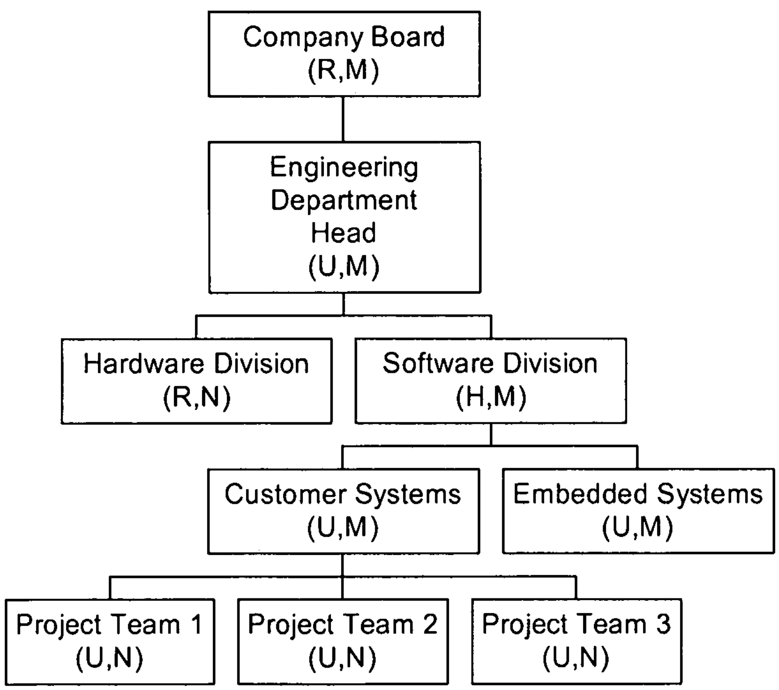
Each user will have the option to display their Leaderboard selections in different ways. Even during a session, a person can change their Leaderboard display options. The primary reason for this is because each person may want to access information differently at different points in time. For example, a person may do the majority of their work on just a couple of boards, so their default display might be those few boards, however, they may also want to access other information once in a while, so they may want to change their display option.

The display options are:

All Boards	This option would display all boards that a person has access too. Access is defined as any access where a person can view any information on a board. This would include boards where the person is the host to boards where they can just view information.
Web Display	This display will show the webs that have been created by a particular company and will allow the user to traverse through the web to select the particular Leaderboard they would like to use. This display will show all leaderboards but will highlight boards that a person can access with a different display.

	Webs come in many different types and styles so this browsing (or menuing) tool will have to support all different configurations.
Member Boards	This display will only show boards that a person is a member of.
Update Boards	This display will show boards that a person has update access to. Access is granted at the tool level, so if a person has update authority with any tool on a particular board, then that board will be displayed.
Custom Display	The custom display allows the user to select the specific Leaderboards they would like to have displayed on their screen. There will be a setup screen
Display Children	This display will be based on the web display but will only display a portion of the Web. It will be user defined for exactly the depth of the boards displayed. For example, if a person selects a parent and 2 levels of children, then all children boards and their children will be displayed. This particular display will be useful when the number of boards varies. Then a person will be sure to get all the appropriate boards without having to select them first.

Company Organization



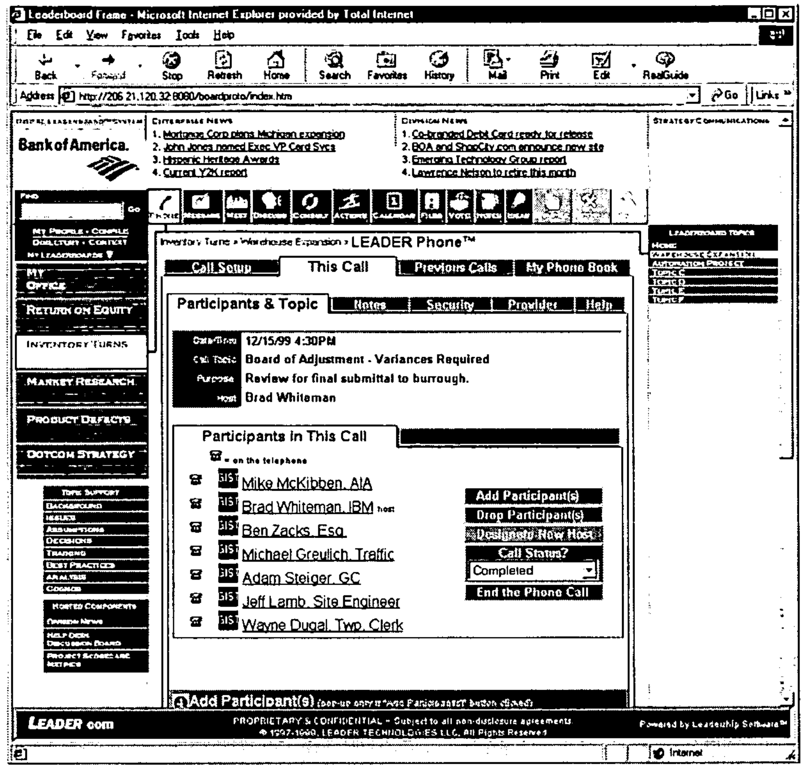
The following is an example of each of these options for a particular person. In this example, the person is the host of the Software division board. The letters in parentheses denote what sort of access the person has to the other boards (R = Read, H = Host, U = Update) and whether the person is member (M) of the board or not (N). This org chart is only meant to show a portion of the organization, in particular that portion that our person would belong to.

Option	**Boards Shown**
All Boards	All 9 of the boards
Member Boards	Company, Engineering, Software, Customer Sys. Embedded Systems
Update Boards	Engineering, Software, Customer Sys., Embedded Sys., Project 1, Project 2, Project 3.
Custom Display	Any set of boards selected
Display Children	If software and 2 children, then Software, Customer Sys. Embedded Sys., Project 1, Project 2, Project 3.
Web Display	The only thing displayed would be the Organizational web.

6. Conference Calls

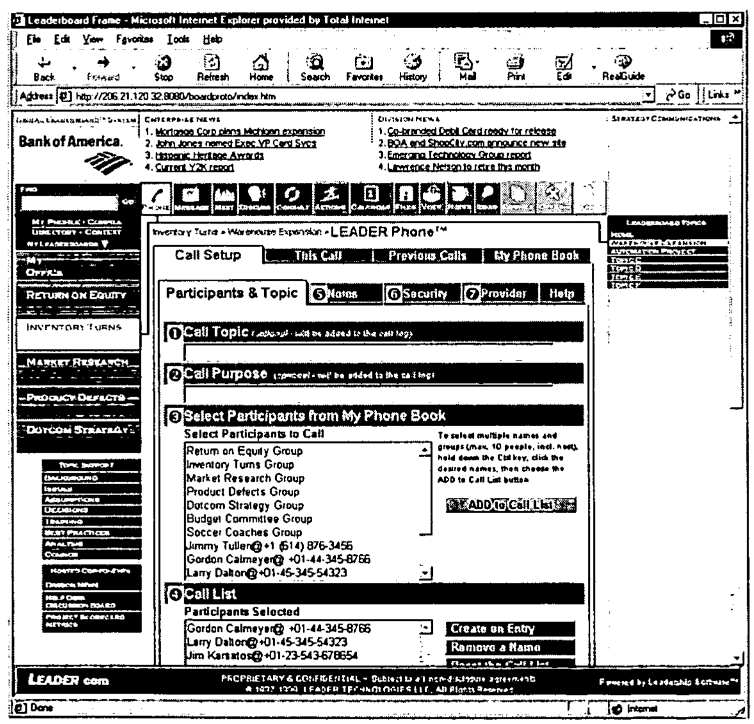
Conference calling is very similar to on-line meetings except that only one person would be on-line in the system and the rest of the people would be connected via a telephone. The same technology will be used when making conference calls from inside of the meeting function.

While a conference call is going on, the information from and about that call will be captured in temporary files. These temporary files will only be accessible to the host of the call. At the conclusion of the call, the information from the call will be saved to the appropriate database files.



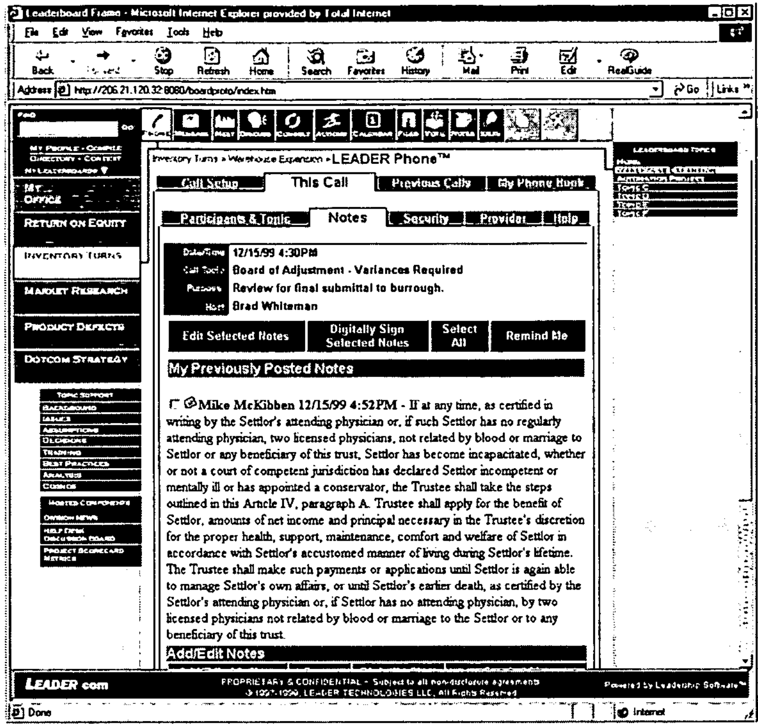
6.1. Setting up a call

When a person sets up a telephone call, they will be provided with a set of options similar to setting up a meeting. They will select a topic, a purpose, select the participants, and place or schedule the call. A person's phone number will either be selected or entered in the calling list. Then that person or persons would be called. The initiator would stay on line and every few minutes would be asked to respond to a popup button asking is they want to stay on line or at least to acknowledge that they still are at their terminal and responding to the phone messages. If they do not respond within a minute, they will be disconnected from the call.



6.2. Placing a call

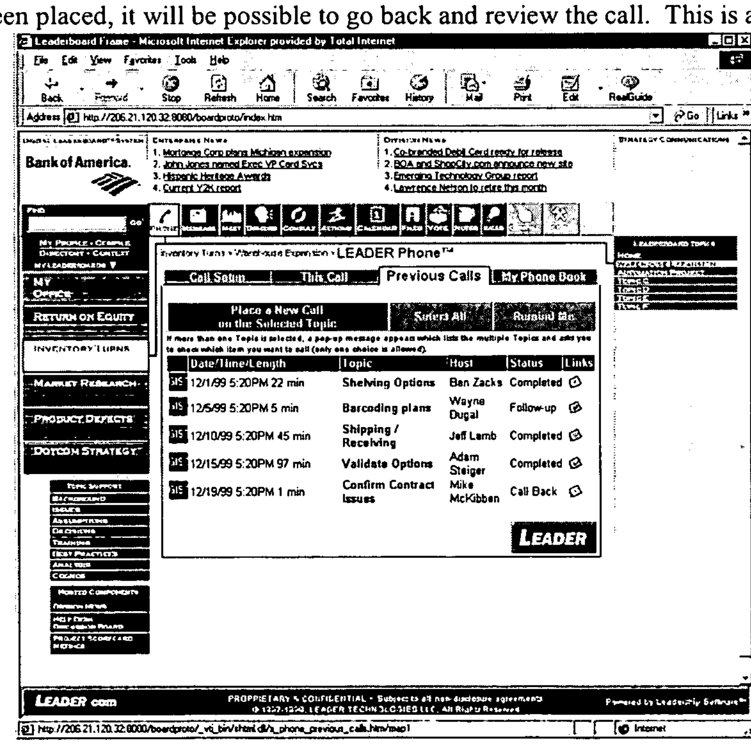
After a call is setup, it can either be scheduled for a future date, or it can be placed at that time. When a person initiates the call, they will be working from a screen similar to the one below. It will list the people schedule to be on the call and the status of their participation. The host will have a number of options on the call. They can keep notes, add people, drop people, or terminate the call. Only the host will see this screen. All the other participants on the call will be connected via the telephone call only. The call is accomplished by calling both the call initiator and the call recipient. The call initiator would have to remain on line while the call is in progress so this person would need to have Internet access other than their primary phone line. If they had two phone



lines, the person would
have the system call them on
their primary phone number
and then call the other
person on persons on the
call. When the system
calls the call
initiator, they will be
prompted to enter a greeting
for the call. When the
other person is called,
the greeting will be played
for them, and then they
will be connected to the call.
If people wish to have the
other participants of the call
on line with the
interface, they should
use the meeting option
rather than the
conference calling option.
This example shows the
notes that could be taken as part of a conference call. The notes would only be viewable to the person taking the notes while they were being created. When the phone call is completed, anyone with read access or better for that Leaderboard will be able to see the information on this call.

6.3. Viewing a call

After calls have been placed, it will be possible to go back and review the call. This is available in the
list of previous calls tab.
Here is what that would look
like:



From this screen, a person can
view information about a call
that was made previously.
The same group of people
can be called, the call can be
viewed and a follow-up
call can be placed, or
the call information
can be edited. It will be
possible to make additions or
corrections to the notes of a
previous call. It will not be
possible to change the
calling parties, or the length
of the call.

7. Universal Messaging

These are some thoughts on how universal messaging should be handled in the Leaderboard system.

One of the primary concepts is to keep the redundant message storage to a minimum, so what we can do is use the Person Message table to hold the relationships between a message and a person. In other words, if a message were sent from one person in the system to 7 other people in the system, it would only have one entry in the message table, but would have 8 entries in the Person message table. One would be the item marked sent, and the other seven would be the entries marked received.

Possible types of messages:	
Sent	Message was sent by the person referenced in Person ID
Received	Message was received by the person referenced in Person ID
Forwarded	The person referenced in Person ID forwarded message. This would require that another entry already existed for this message and person denoting received by this person
Replied	The person reference in Person ID replied to message. This would require that another entry already existed for this message and person denoting received by this person

A message could also be designated as deleted for purposes of a user display. In other words, if a message is received, and it is forwarded to 6 other people, and then the person decided they did not want to keep displaying the references to the forwarded messages, they could be "deleted" or removed from the display.

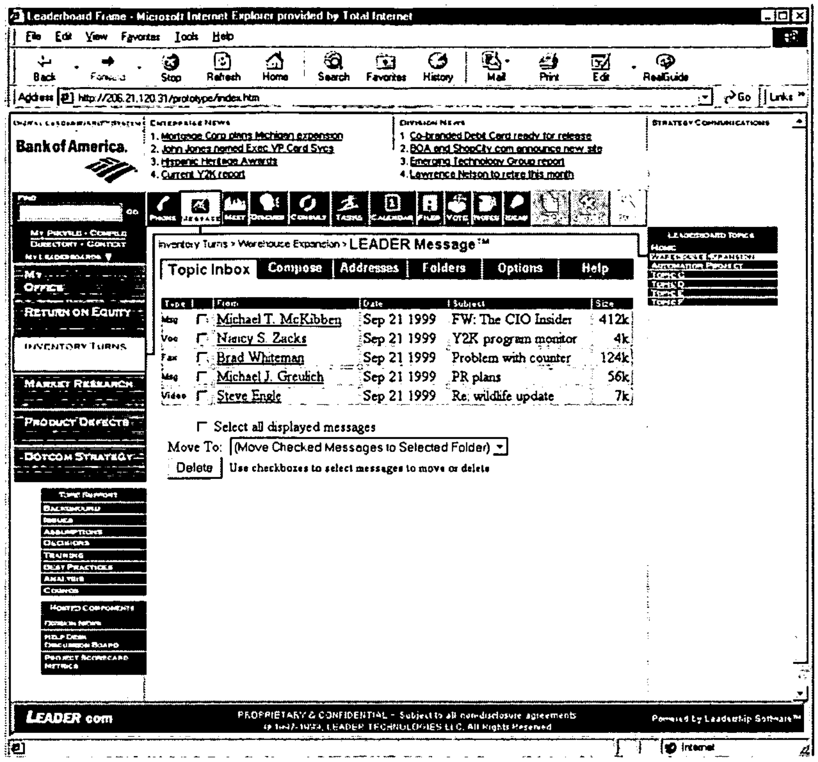
A person could attach a note to any message they were authorized to read. If a person was on a Leaderboard, and they read a message and wanted to attach a note to that message, they would be able to do that with the attach message feature. It would operate similar to a sticky note, where any additional information about the file could be added.

This same approach would be used with a Leaderboard Topic. The idea is that a Leaderboard Topic would have the same ability to send and receive messages as a person would. Granted people would have to be given access to actually perform either of these tasks, but the task could be done by representing the board. We still need to determine if everyone will be allowed to send mail from a Leaderboard Topic, or if mail from a Leaderboard could even be allowed to go external to the company. From a design standpoint, it should not make too much of a difference as long as a Leaderboard Topic is allowed to send and receive mail, and any person who has read access on a board could read messages in the Board inbox.

We need to have a link table between person and Message Topic to capture whether a person who has access to a board, has read a message or not. If they have not, they could have the message appear in a display that shows all new items on any board that a person has access to.

The message status field would be used to signify whether a message has been read, acknowledged, or is still new. This feature will be significant when a person selects compile from their One-touch toolbar, or if they have a virtual folder created to view new items. The acknowledge status allows the user to remove the item from the unread display without actually saying the message has been read. This way a person can be truthful, and say that they realize they have an item on their system, but they don't have an opportunity to read it yet, or may never actually need to read it. All of these features will allow the information to be displayed inside of a screen for processing message traffic.

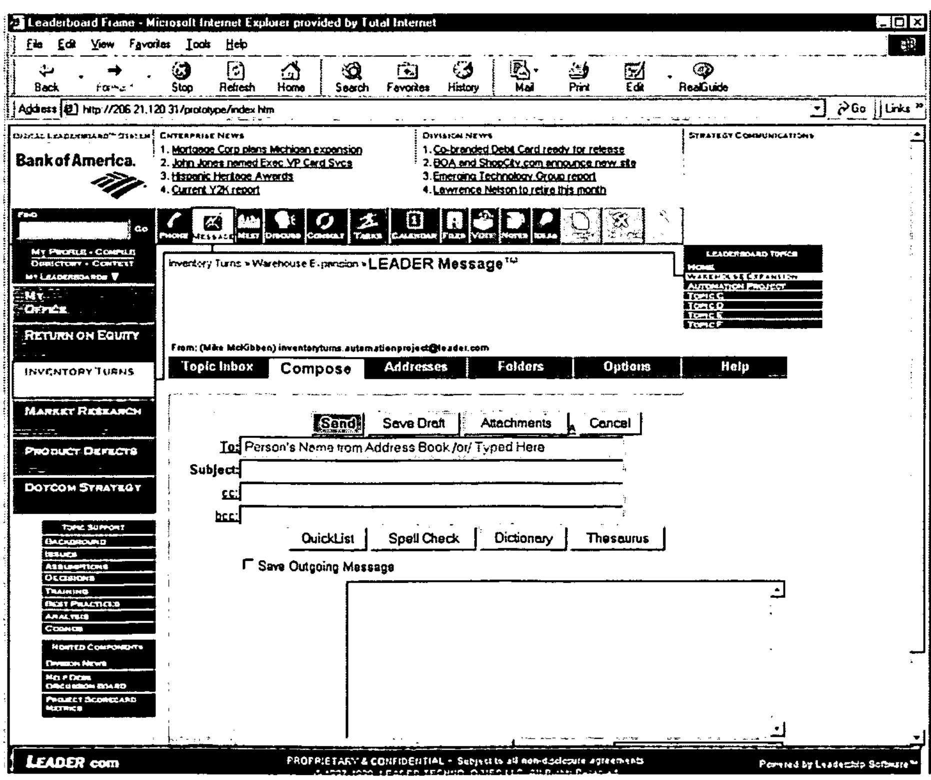
7.1. Message Screen display



The message screen is intended to display all the necessary information about a message so it can be processed as quickly and efficiently as possible. It will list the subject of a message, the person who sent the message, the date of the message and the size of the message.

There are a number of functions a person can perform from the inbox window. They can read the messages, file messages in a virtual folder, delete messages, acknowledge messages (reference the compile functionality), or create reminders for messages. It will be also be possible to select multiple messages from the messaging window and process them all in a similar way.

A person will also be able to create a totally new message from a Leaderboard/Topic. This will allow the "system" to communication with another person or Leaderboard and provide a valuble shared resource. Only people who have create authority on a Leaderboard will be able to reply to messages or create new messages. This process of having the system communicate is central to the Leaderboard system. It is the central core of the automatic context functionality. Having a message come from a Leaderboard, automatically creates the connections for the information in the message. Any responses to that message would be automatically placed in the correct Leaderboard/Topic inbox and would then also be automatically put in context.



The message view will support most typical messging features like forward, reply, reply all, address book maintenance, and compose new messages.

7.2. Virtual Folders

A virtual folder is a way to manually categorize information and

remove it from the normal display screen. In other words, if a message is sitting in an inbox, a person working on a Leaderboard may want to get the message out of the inbox, but still keep it on the Leaderboard/Topic. An easy way to do this is to create a group listing of like items, which becomes a "folder" of information. The virtual folder is another way to categorize information and put it into context, and it removes some of the clutter from otherwise busy desktops.

7.3. Composing a new message

From any messaging board where a person has create authority, they will be able to create a new message. This will provide typical e-mail functionality for the creation of messaging. The associated screen provides an example.

7.4. Address Book

The functionality and design of the Address Book will be covered in the section concerned with telephone calls. The address book will be the same for messaging, telephone calls, faxing, or capturing particular information about a person. A further discussion of the address book is contained in the Conference Calling section.

7.5. Voice Mail

Voice mail is functionality we would like to have in the system, but we are not sure at this point, whether the technology is mature enough to support receiving, storing, and indexing voice mail messages.

Voice mail will be moved (copied) to a Leaderboard in much the same way as e-mail would. From inside of a voice mail system, a person can forward a message to the Leaderboard and it will show up in the universal inbox. When the host (or designee) of a Leaderboard listens to the message it will be associated (categorized) just as e-mail messages are. The host will also be prompted to put in a short description of the message for filing and tracking purposes. This way everyone one else will not have to listen to the actual message (although they could), they could just read the recap and know what the message was about.

A specific use of this technology would be to leave a voice message in a Universal Inbox from a mobile phone and have it be used as a reminder or a quick messaging service. It could also be used to capture important thoughts on the board when a person is not at a computer.

(We need to more fully explore the options here.)

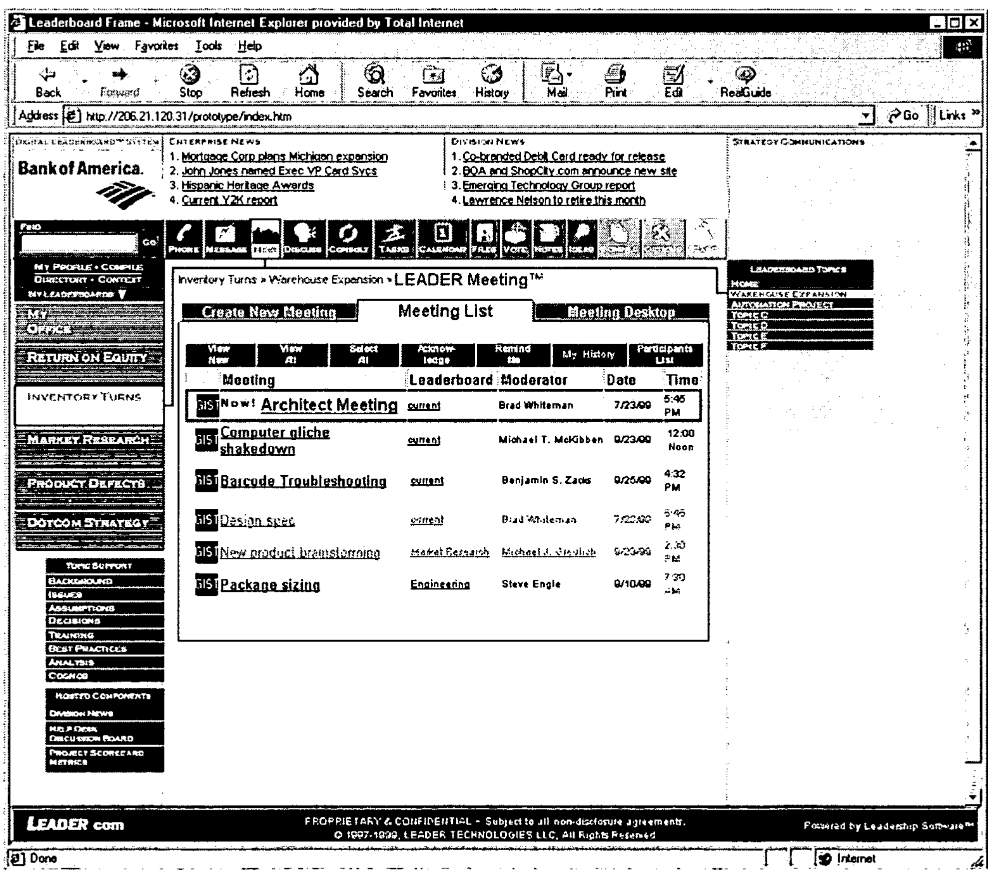
8. Meetings

Meetings are a unique kind of calendar event. They are not only scheduled and placed on a calendar, but they also occur on line and the information associated with each of the meetings is captured as part of the Leaderboard process.

While a meeting is going on, the information from and about that meeting will be captured in temporary files. These temporary files will only be accessible to the participants in the meeting. At the conclusion of the meeting, the information from the meeting will be saved to the appropriate database files.

8.1. Meeting List:

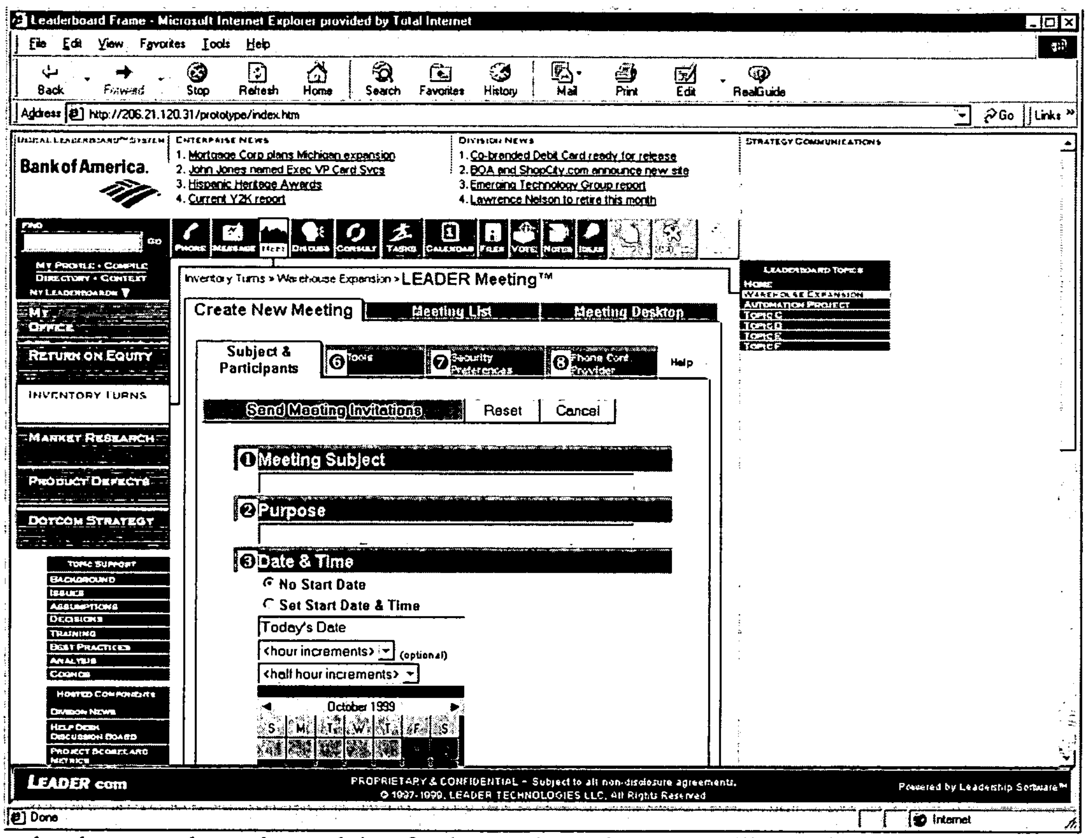
The default view for meetings is a list of meetings, which have already occurred, or are currently going on. A person will have the option of viewing meetings that have already taken place or joining in on a current meeting. There will be a lot of information associated with meetings and it is important to provide a person an easy way to review the information about that meeting. Most meetings a person participates in will be on a shared Leaderboard, but there will be occasions when a person is invited to a meeting which is being hosted on a Leaderboard, but the person does not have access to the Board itself. Rather than go through the process of getting a person added to a Leaderboard just for the meeting, the meeting in this case will appear for this person in their Office. So they will select and participate in the meeting from their office while the rest of the people in the meeting could be on a Leaderboard. It works this way because a meeting can belong to multiple boards. For each board it is associated with, it will appear on that forum.



8.2. Creating a Meeting:

Anyone with write permission on a Leaderboard can create a meeting. Just as with face to face meetings, virtual meetings can have varying purposes, any number of participants, and different approaches. There is no one single meeting style that the Leaderboard meeting forces a person to use.

To create a meeting, a person first needs to decide what the purpose and the subject of the meeting is going to be.



Then they have to select a date and time for the meeting. The screen will provide a calendar to assist in selecting a date. Then they would need to select the participants for the meeting.

If there are any files or read ahead information for the meeting it should be included too. Attached documents are part of the tools section for a meeting. Other tools include the Meeting Feature itself, Phone Conferencing, Projector functionality, Chat, e-mail, tasks, and archives. Each of these tools if selected will be available from the on-line meeting.

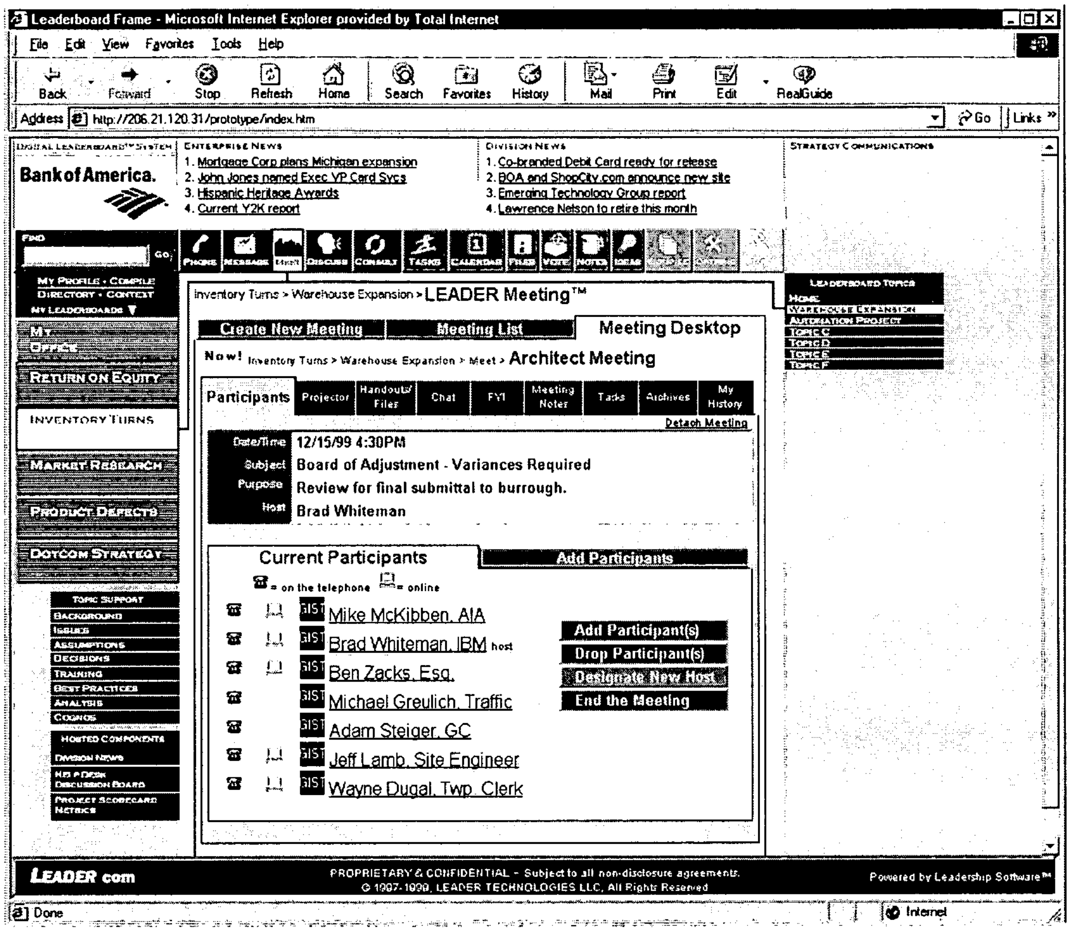
If people will be connecting with the conference-calling feature, then a telephone carrier provider can also be chosen.

8.3. Meeting Desktop:

The meeting desktop is the actual location where the on-line meeting occurs. After a user selects a meeting to join, they will be taken here. This desktop provides all the tools that were previously selected as necessary for the meeting.

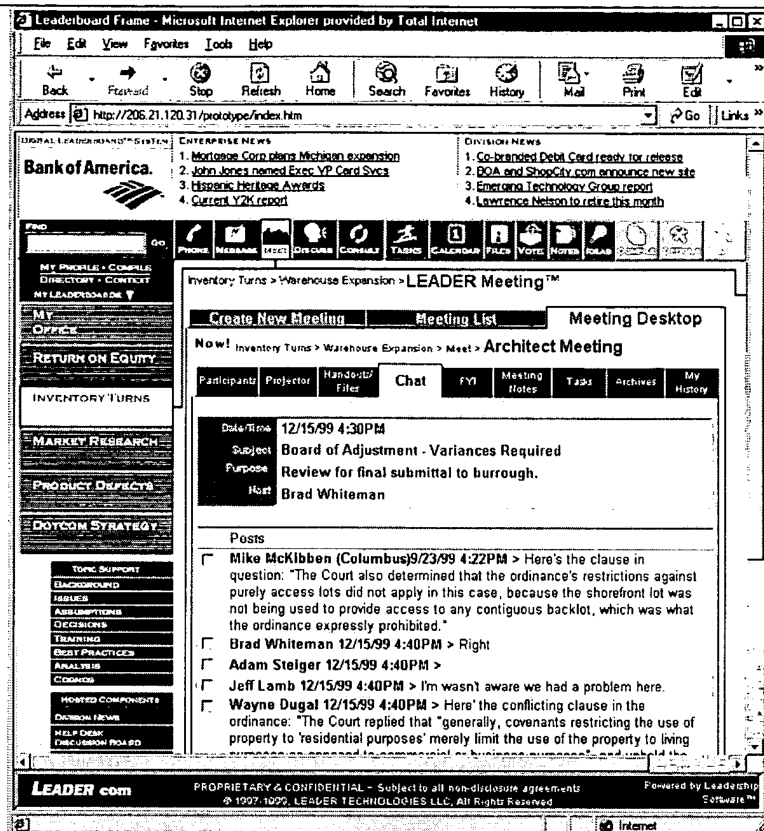
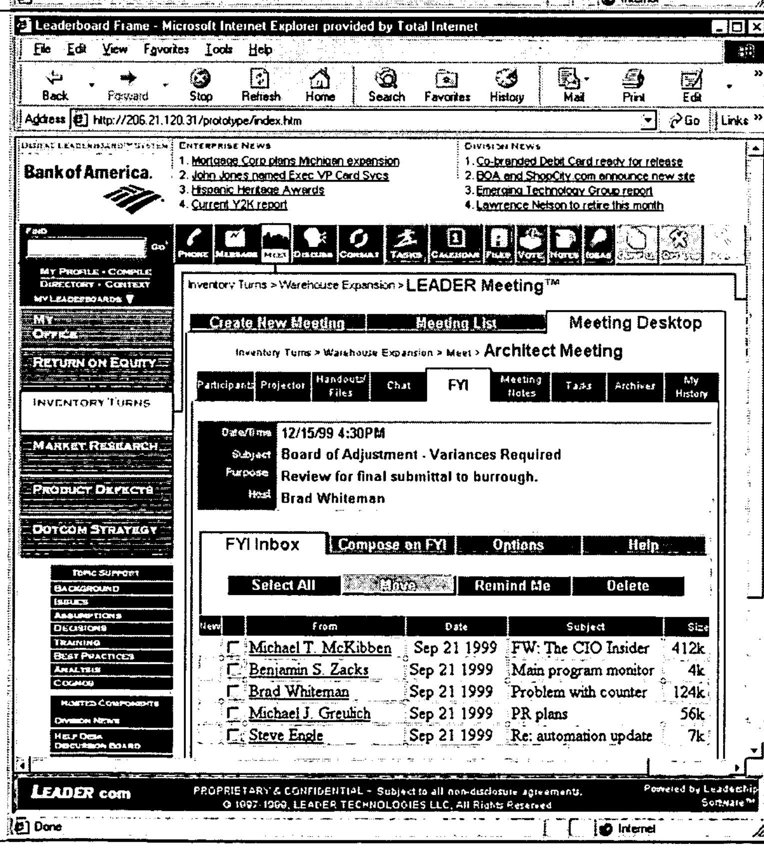
As the following screen shows, it will list the various participants in the meeting, including their status, it will also allow the host to add or drop people from the meeting.

The meeting itself can have a large number of components. It can have chats, FYI messages, tasks, files, projector show, notes, and meeting archives. A meeting can utilize any or all of these component features.



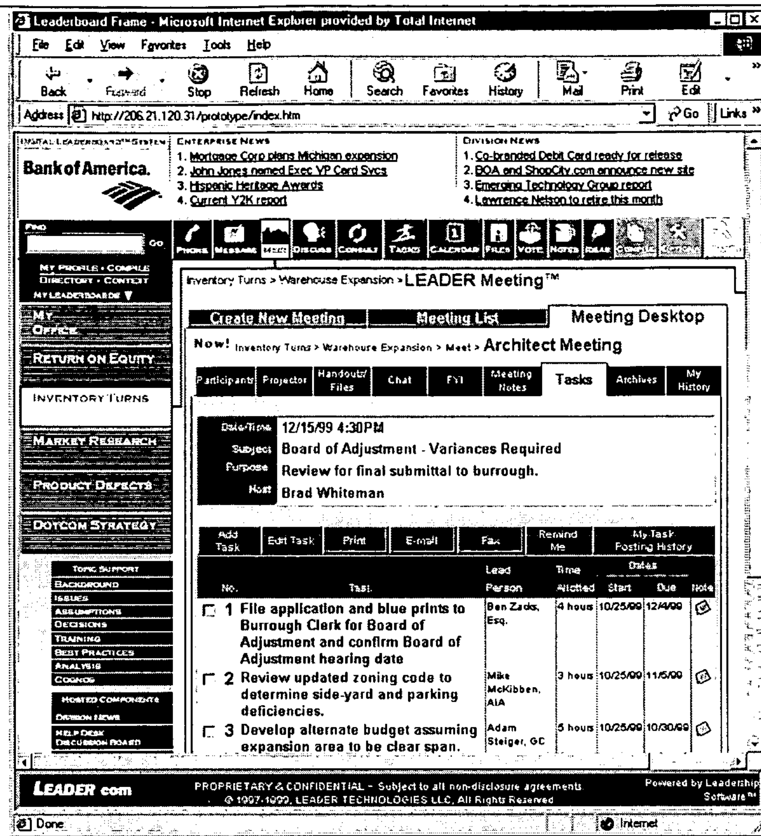
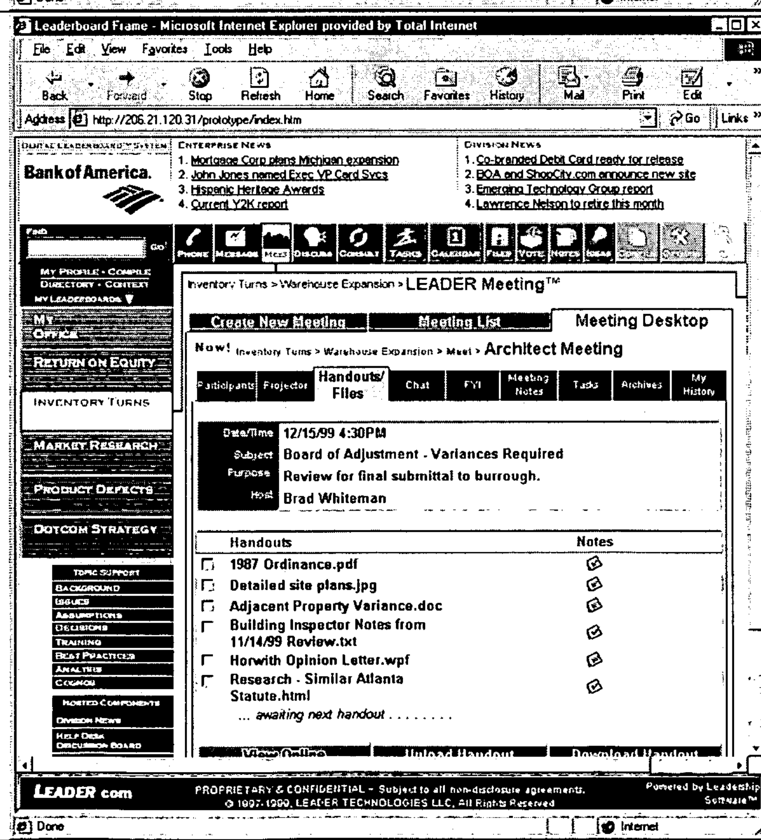
LEADER Project Functional Specification

Draft Version 2.2

Chats	Chats are where on-line conversations take place in a written forum. All the participants in the meeting can be a part of the chat and they can add a comment at any time.	
FYI Messages	FYI Messages are like passing notes in the meeting. It can have additional files attached. The idea is that people will use this as they would a note in a meeting. They can just hand the note to someone, or they can attach a note to a larger document.	

LEADER Project Functional Specification

Draft Version 2.2

Tasks	This is a shortened way to create a to-do task for members of the meeting. If action items occur as an outcome of the meeting, they could be automatically connected to the appropriate person.	
Files	These can be of any type. The only common thread is that they need to be shared with the other people in the meeting. The viewing of these files would take place off line by each individual.	

LEADER Project Functional Specification

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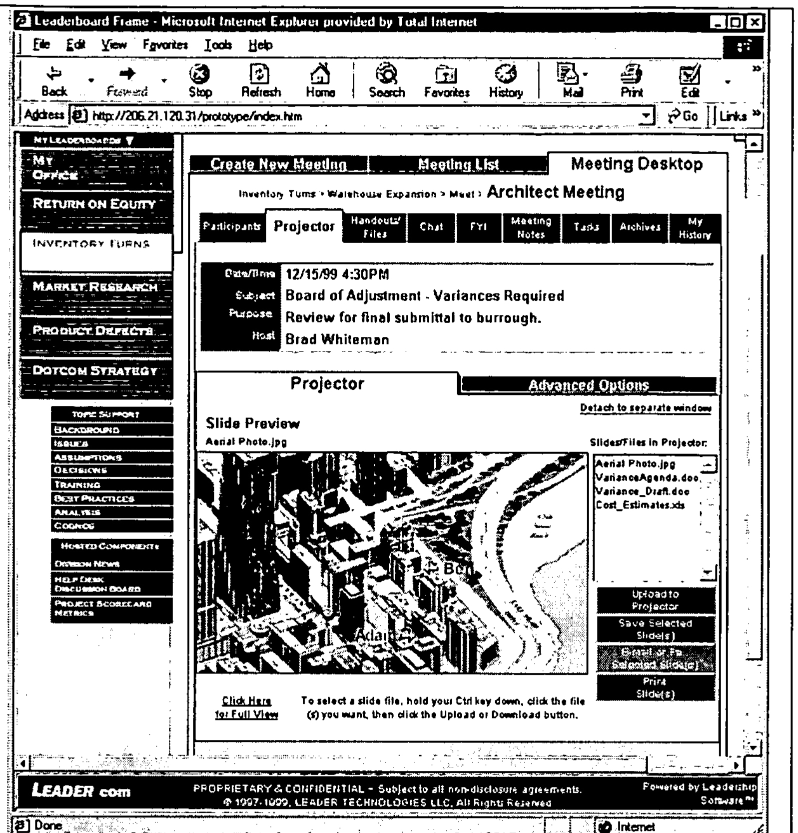
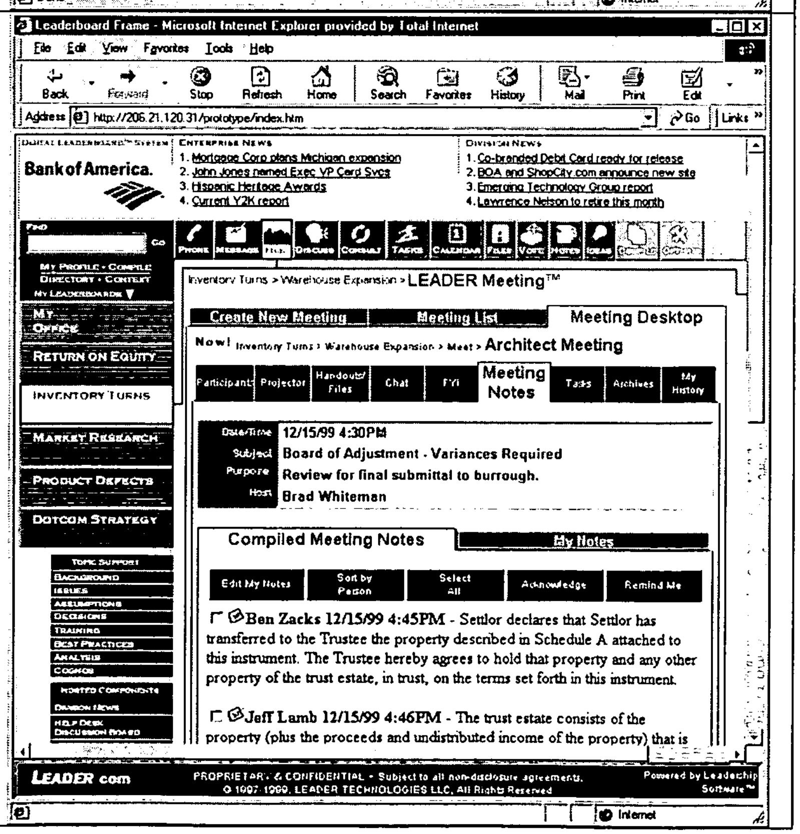
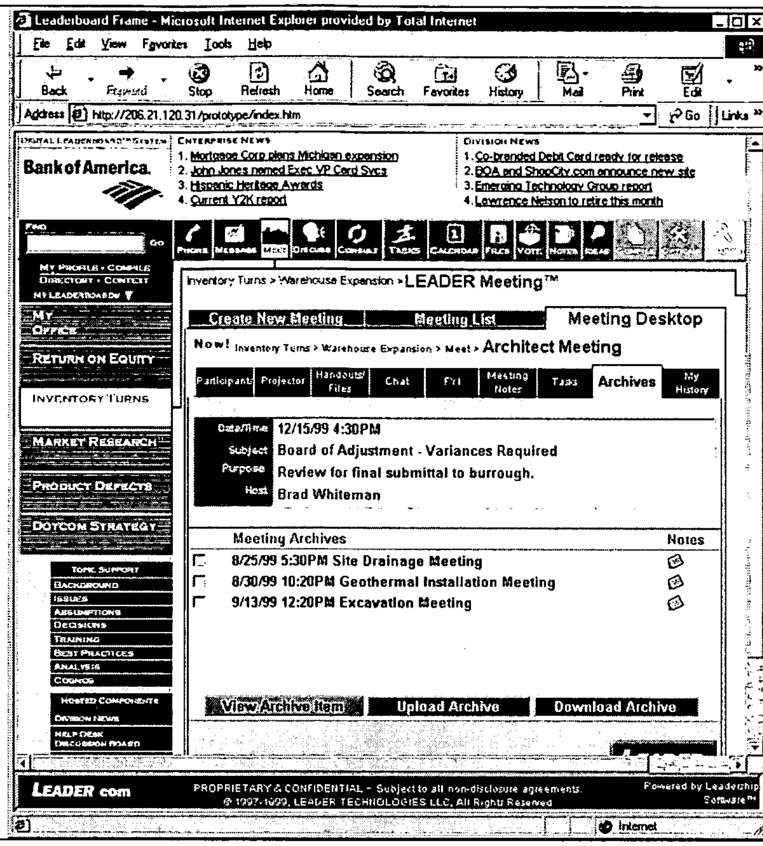
<table>
<tr>
<td>Projector Show</td>
<td>The difference between a file and a projector is that the projector show will display a file, presentation or picture for all the meeting participants to see. It will be a part of the overall meeting flow.</td>
<td>
</td>
</tr>
<tr>
<td>Notes</td>
<td>This is a place for a person to take any individual notes they want to capture having to do with the meeting. There are two types of notes. One set is the group notes, which will be the public record for the meeting, and the other will be private and only belong to the person taking the notes.</td>
<td>
</td>
</tr>
</table>

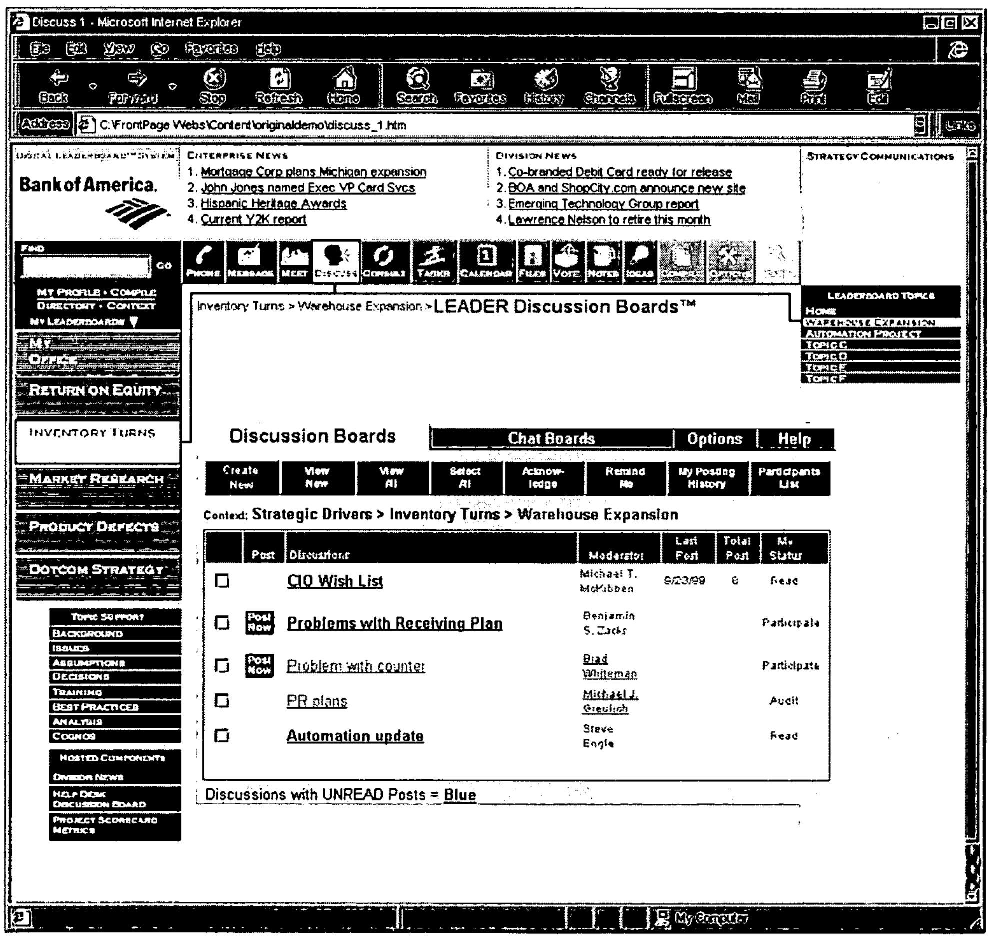
Meeting Archives	Archives are lists of meetings, which have taken place in the past. They are listed here in case any of the members wish to refer back to previous meeting information.	

9. Discussion Board Functionality

A discussion board is intended to provide a place for a group of people to have a discussion on a particular subject or topic. Discussions will take place over a long period of time because the people who are participating in the discussion are not all using the tool at the same time. The benefit of the discussion is it provides for discussion and the sharing of ideas with people who are not all interacting at the same time.

Each Leaderboard will have the functionality of having a discussion on it. This includes the personal My Office Leaderboards. When a discussion is started, a person who has access to a particular Board goes to the Discuss Option and selects Start a New Discussion. They will be prompted for the Purpose of the Discussion and the Title of the Thread, and then they will be prompted to enter a discussion note.

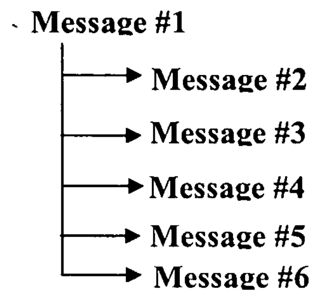
The idea is that a person who has create or add permission to a board creates a new entry in the discussion table. This automatically creates an entry in the Discussion Leaderboard table as the person is already in a particular Leaderboard. When this entry is made, the person will begin entering information into the Discussion Note table. This is the actual note on the discussion topic. Because this is the first note in a discussion, the Discussion Note relationship will list the note but will not have an entry for the previous in thread.



The discussion note relationship provides for a way to recreate the discussion thread. A note can be added anywhere in the thread after the first message. Therefore, it will be possible to have multiple entries that reference the first message as the previous in thread. If this were the case, the display would look something like this:

In this example, each of the messages are only related to the first message and not to any of the other messages. The database entries would look like

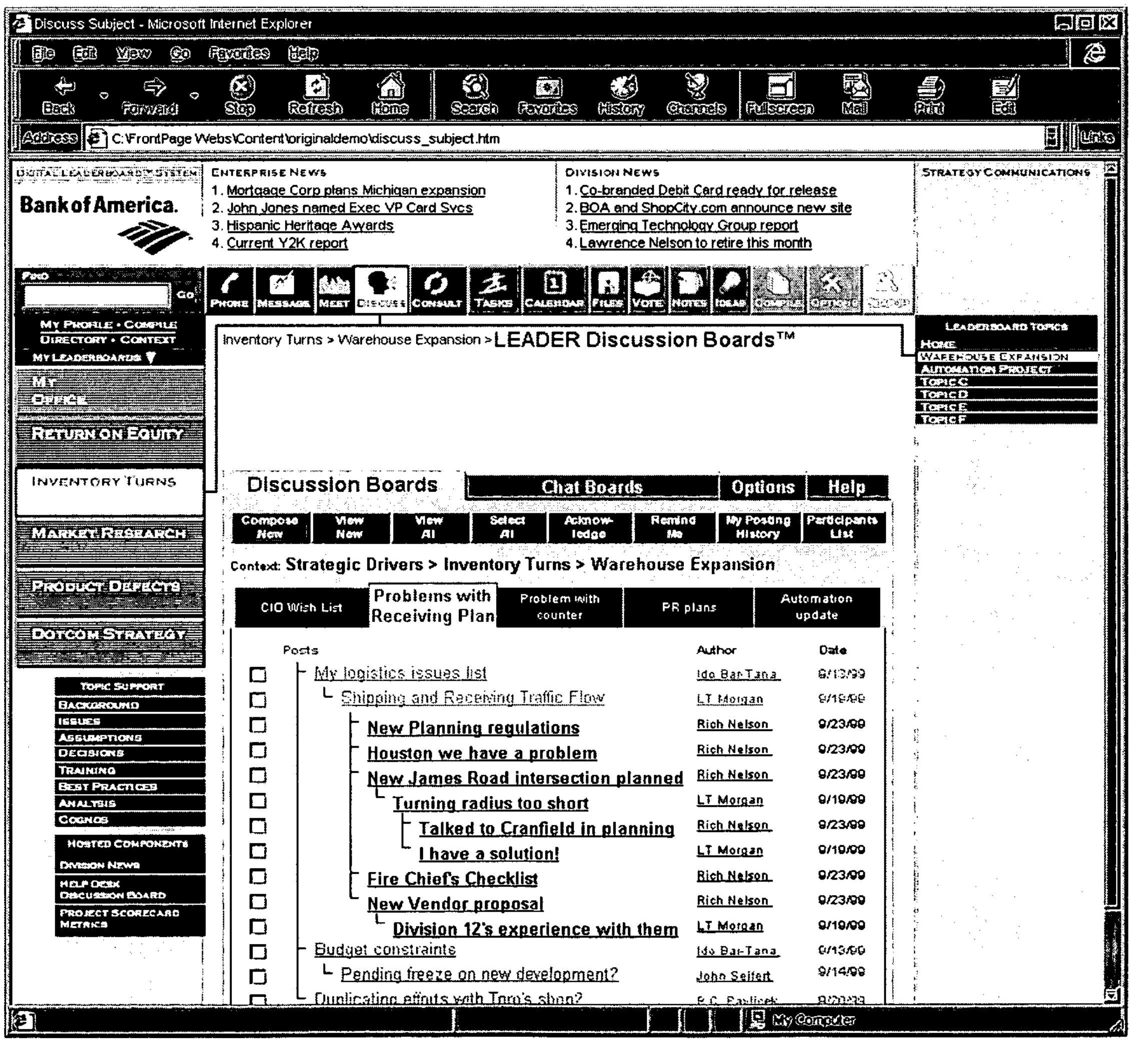
Message #1: No previous
Message #2: #1 Previous
Message #3: #1 Previous
Message #4: #1 Previous
Message #5: #1 Previous
Message #6: #1 Previous



The purpose for this table is to show the context for a particular message, so a reader could see quickly where that particular message fits into a thread.

Another example would be where messages were built upon other messages in the thread. This example could look something like this:

In this case, the database entries would look like:

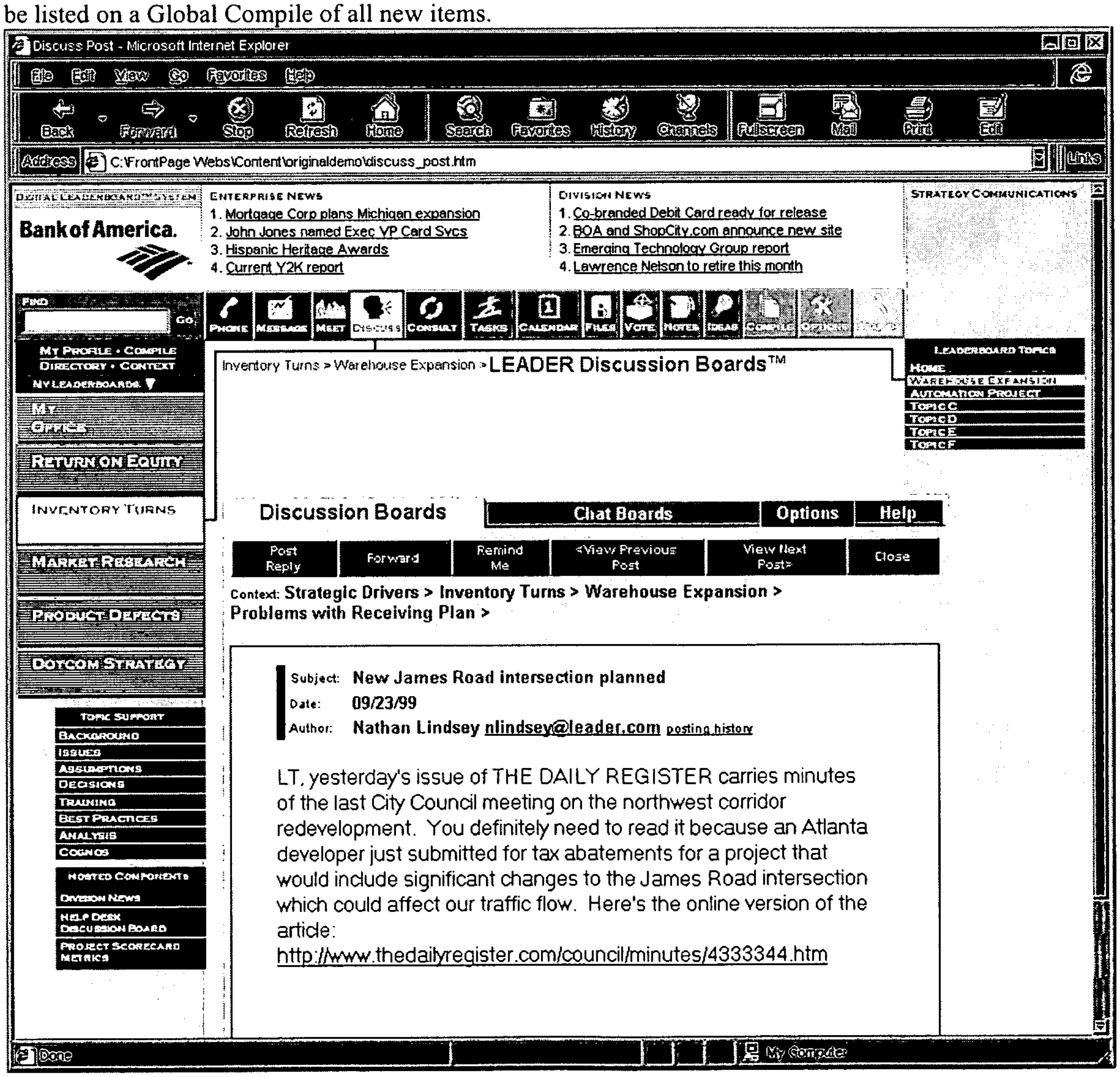


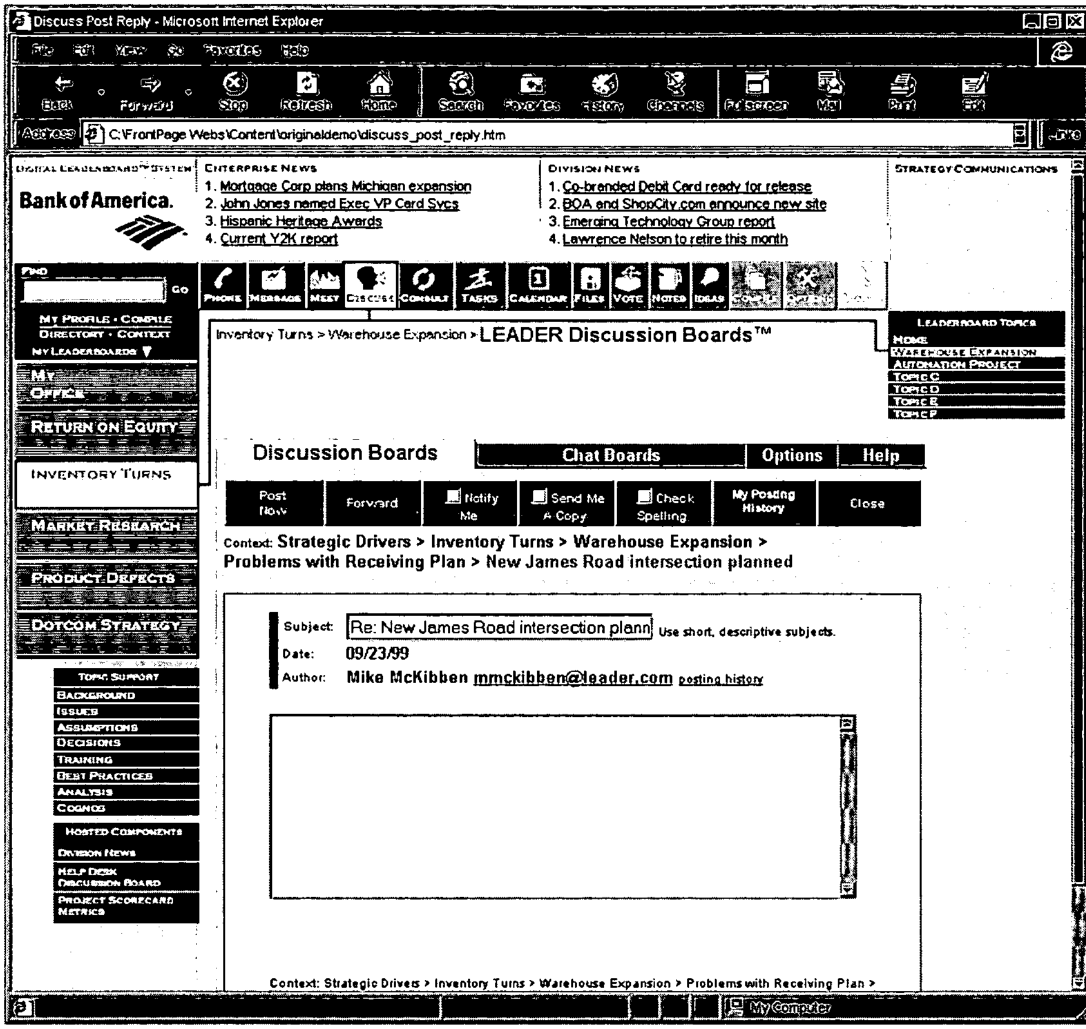
Message #1: No Previous
Message #2: #1 Previous
Message #3: #2 Previous
Message #4: #3 Previous
Message #5: #2 Previous
Message #6: #5 Previous

Message #1
- → **Message #2**
  - → **Message #3**
    - → **Message #4**
  - → **Message #5**
    - → **Message #6**

In any case, while reading a discussion thread a person may want to make a particular entry at any point in the thread. This will allow them to do that.

The Person Discussion Table will be used to notify users of new items in the system. So, if there were a number of new discussion entries in the discussion note table, and these entries had not yet been acknowledged or read by a person, they would be listed on a compile of new items on this particular Leaderboard, or they would be listed on a Global Compile of all new items.



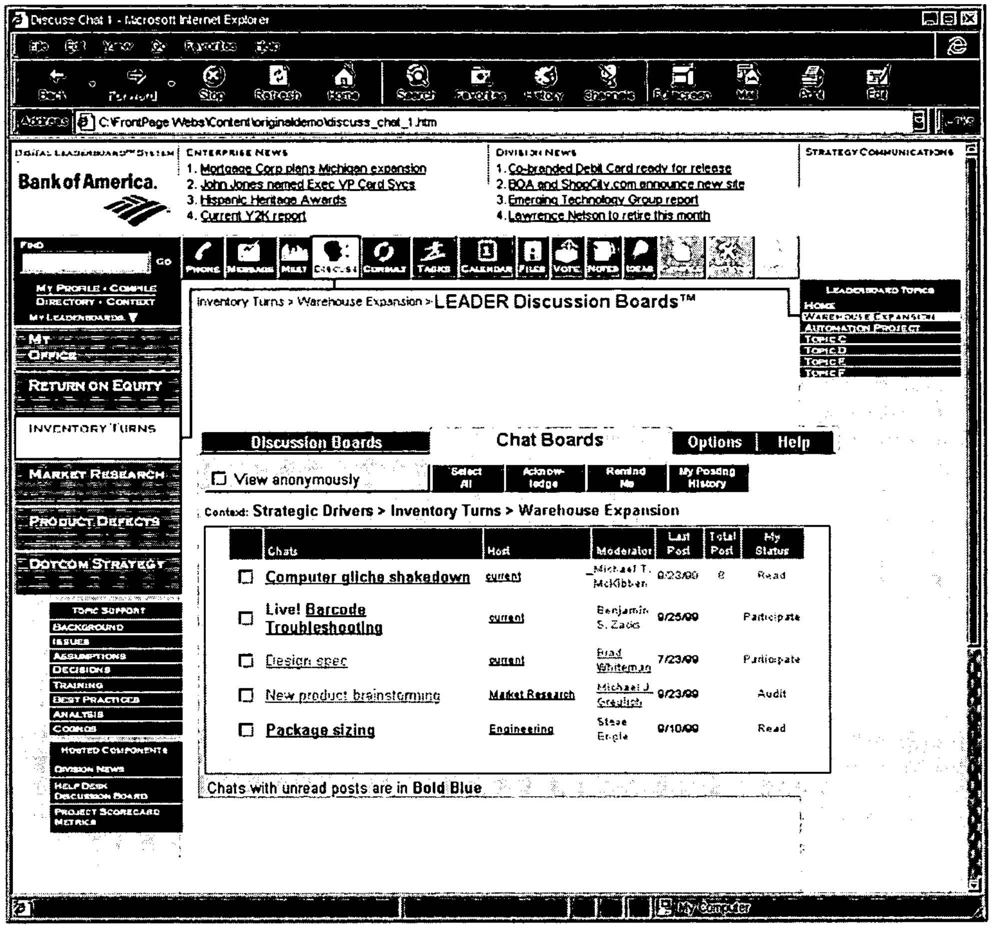


Attached notes can be added by anyone who has write permission to a Leaderboard. An attached note is like a sticky note attached to a particular item to add virtually any type of information. This attached note would be readable by anyone who has at least read access to a Leaderboard.

It is possible for a discussion to be shared across more than one Leaderboard. The entries in the Discussion Leaderboard table would only list the high level purpose of a discussion. So for example, if there was a discussion going on and someone decided that the information in the discussion would be value if it were shared with another Leaderboard, then they could create a new entry in the Discussion Leaderboard table for that particular discussion. This would automatically cause the discussion to appear on the other topic.

9.1. Chat

Chat functionality is the ability to have a real time synchronous discussion with someone. A chat requires that two or more people be connected to the same system at the same time so they can communicate with each other.



Chats are more time based than discussions. A discussion can take place over a long period of time and people will share ideas and thoughts when they are in that particular part of the system. There isn't any guarantee that the other posters are using the tool at the same time.

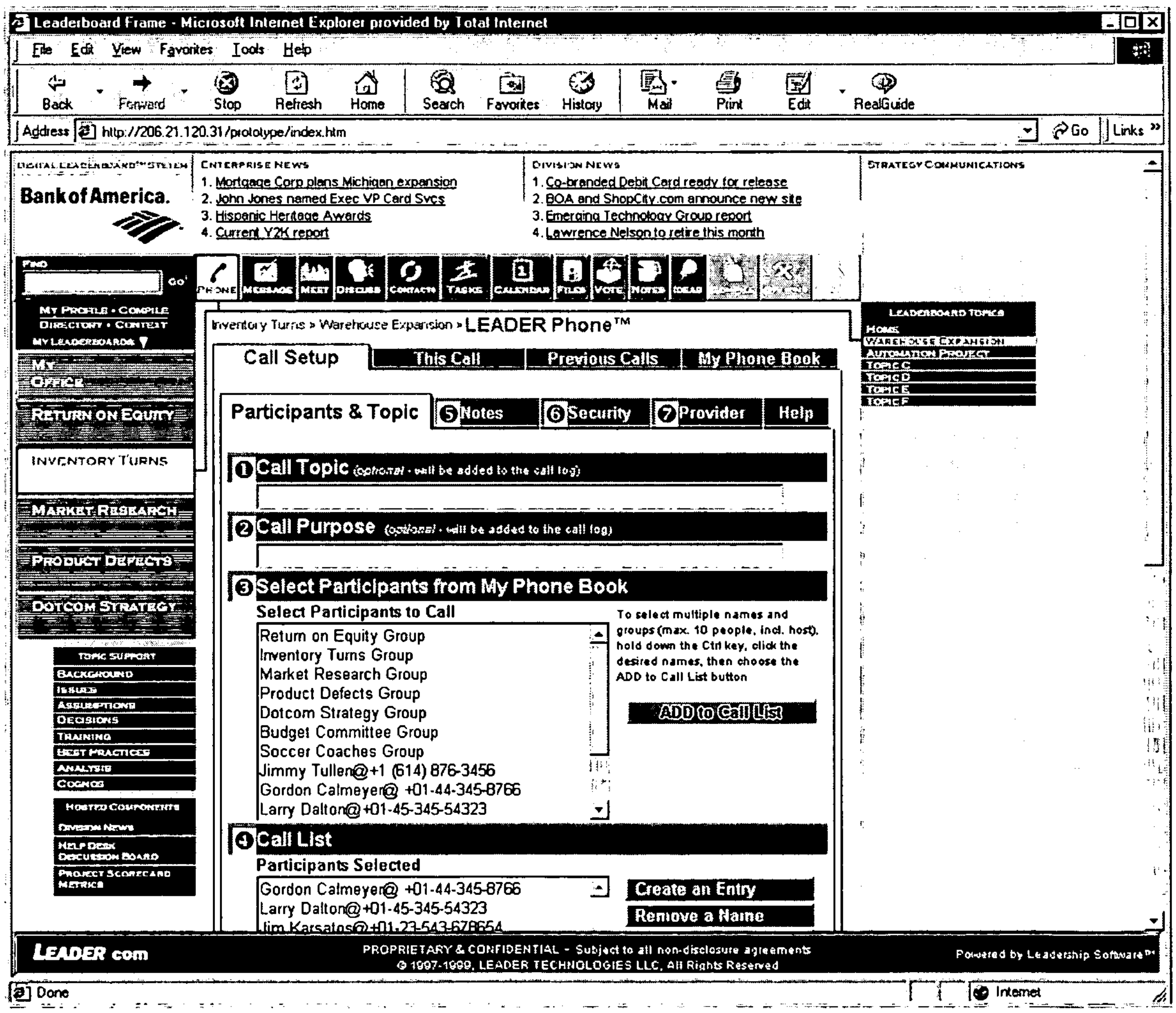
Chats will end up being a lot like on line meetings, only they are expected to be impromptu. If an online conversation is planned, a meeting may be a better location for it, because there is better functionality there.

A chat is a component of a meeting.

10. Address Books

The Leaderboard System will support thousands of users. We need to make it as easy as possible to add users into telephone or address group listings. The creation of an address book will come with the creation of a Leaderboard. An Address Book will exist for a Leaderboard initially based on the specific people assigned and given access to the board. If a Leaderboard is created and four people are given access to that Leaderboard, then those four people will be listed in the address book for that Leaderboard.

For an individual address book, only one person will be assigned by default, and therefor only that one person will be listed in the address book.



10.1. Personal Information

There will be a variety of uses for the information contained about a person. It will be used for telephone calls, email, fax, address listings, and probably many others. There will be records in the persons table corresponding to employees of an enterprise and to individual people added for address books. There will be a type field in the persons table to differentiate between an enterprise employee person and an entry in an address book.

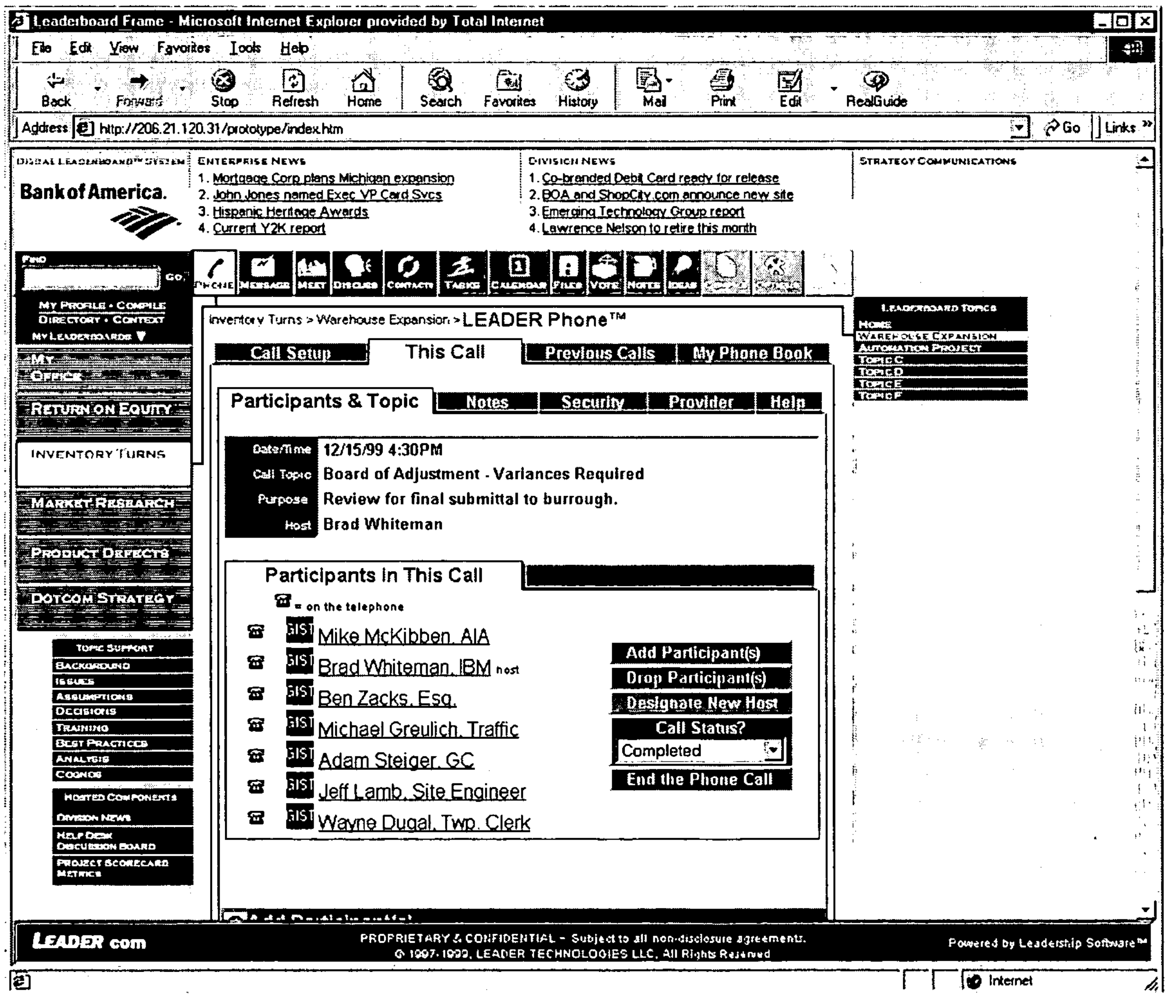
There will also be tables related to a person which will contain e-mail addresses, telephone numbers, and postal addresses.

Access to specific data on a person will be controlled via access permissions. It will be possible to add a personal telephone number on a record, but not have it available to anyone else in the system. The specific data that will be controlled will be telephone numbers, addresses, and e-mail accounts.

10.2. Groups

There will not only be a large number of people, but there will also be a large variety of people. It will then be important to try to group some of the users together into logical groups of people. The system will create some of the groups automatically and the user will create others manually.

The simplest group will be the entire enterprise for a company. This list will be related to the company Leaderboard which will be created by default. If a company has people in multiple locations, there will also be company location leaderboards created. Each leaderboard will create a group list by default. As users are added to a Leaderboard, they will be added to the group. Therefore, if a



Leaderboard were created with five users on it, a group list will be created with the name of the Leaderboard, consisting of all the users on the board. This group list will automatically be added to the groups table and a corresponding entry will be made in the groups person table for each individual person. In any group that is automatically created by the system, the group entry will be added to the Address Book Person table. So all of the members of a group will have a group entry added for them corresponding to the group, or in this case Leaderboard. When an automatic entry is being made to an individual users address book, the individuals address book record will be checked to ensure that entry

does not already exist. A record will be determined to already exist if it has the same person id and Leaderboard id as an existing record in the Person Address Book table.

There are two types of telephone listings, hereafter referred to as contact lists. There is a personal contact list and a leaderboard contact list. The listings will be treated the same for the most part because the functionality of an individual person's Leaderboard will be the same as a shared Leaderboard. The one difference will be in access to the particular information. Any contact added to a My Office Leaderboard will not be available to anyone else in the system. It will be considered a private entry for that person. An entry on a Leaderboard on the other hand, will be shared among all the different participants on the Board.

10.3. Creating your own group list

Each person will be able to group other people in the system in any number of ways. People can be grouped to make e-mail addressing or conference calling easier. In each case, a person would only have to enter the name of the group and then select all of the people to go into that group.

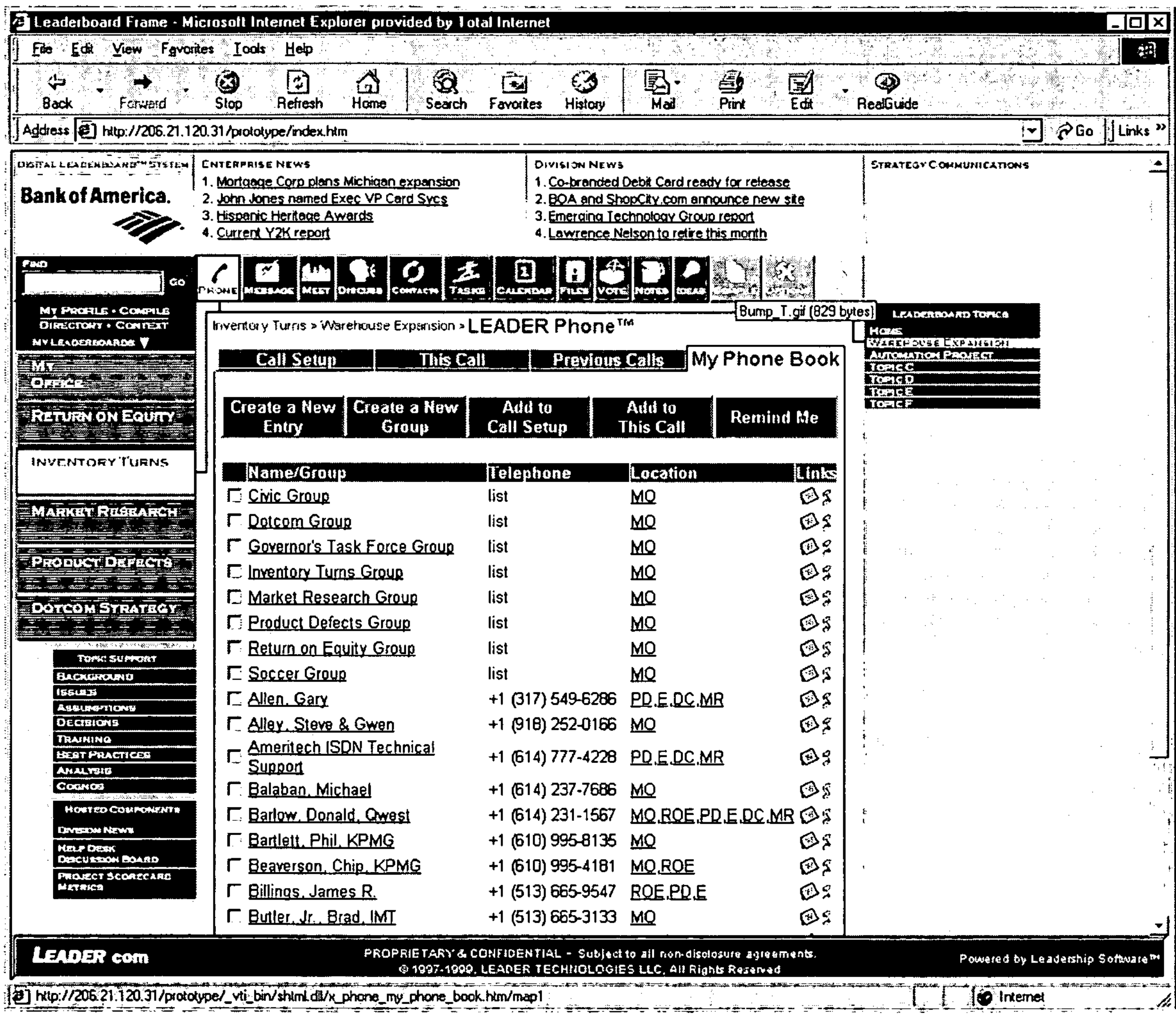
When using a group list, it will also be possible to deselect individual people after a group has been selected. So, if a group of 10 people was selected, but the user knew that one of the 10 was not in the office that day, that person could be removed for the purpose of that particular event (meeting, call, message, etc.)

10.4. Contact list

Contact lists will be available on all Leaderboard's. An individual's Leaderboard, (My Office), will list all the people in a personal address book, while a Leaderboard contact list will list all the people assigned to the Leaderboard as well as other people of interest or relevance to the Leaderboard. As an example, a Leaderboard group may all work at night and they want to have the phone number and address of a local restaurant in the contact list for the Leaderboard, it could be added there. By adding a contact to a Leaderboard Contact List, an entry will also be in the individual contact lists for all the participants on the Board. Unless an entry for that Person based on the Person ID already exists.

A personal address list is a list of all people a person has entered, either called, or e-mailed. This will create many entries in a person's address book automatically. This list can be edited or maintained on the personal leaderboard under the contacts One-touch selection.

The number of people in an enterprise makes it unwieldy to use the person table as the primary address book. Each person will then have a personal address book, which will contain people that the user has either called or sent e-mail to in the past, or someone they contact frequently. There will be a personal preference, which will allow people to decide if he or she wants to add each person called or mailed, to their personal address book. This will provide a shorter more usable listing of names and telephone numbers. There will be an option on each view of the address book to perform updates. For example, in the messaging application, it will be possible to update your address book directly. This will be true also in the telephone calling application.



10.5. Address Book Person Table

When an individual record is added for a personal address book, the Person ID of the person adding the record will be captured in the Address Book Person table. This will not be done on records added to a shared Leaderboard. This will allow the system to differentiate the two types of records. The records in the Address Book Person Table will make up the Address Book for a Particular Leaderboard. This means that not only will individual entries be displayed here, but group entries will too. If an entry is for a group, there will be an entry made in the group id field, otherwise there will be an entry made in the person id field.

11. Task Items

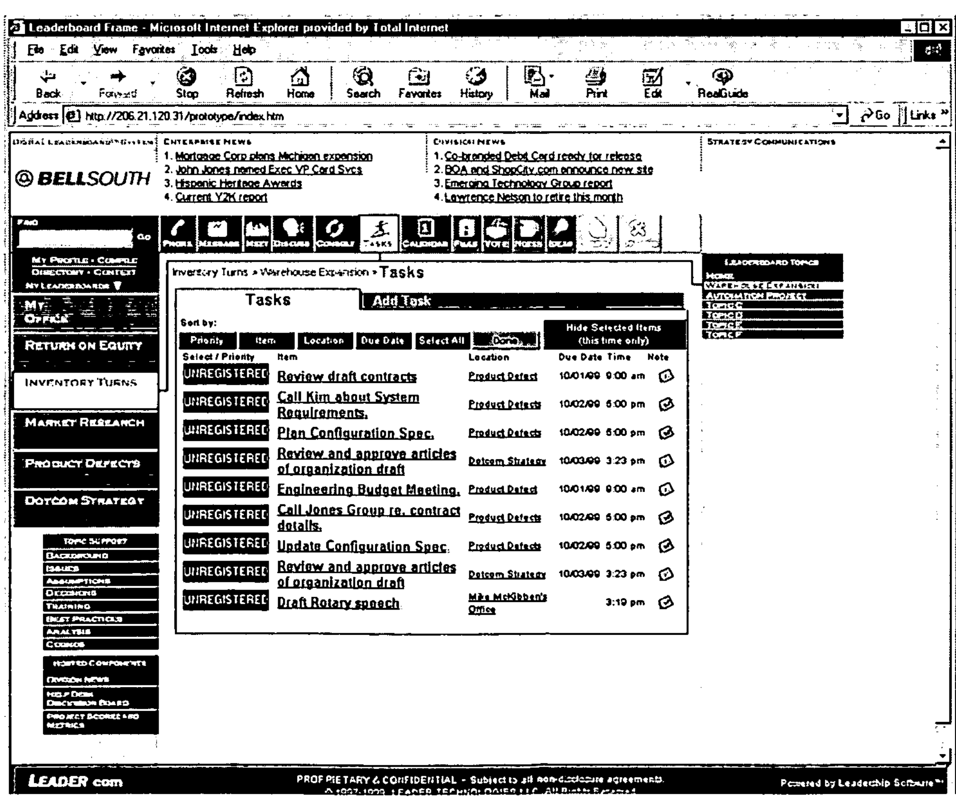
A task item is an item or job, which has to be accomplished. In many ways, tasks are very similar to calendar items. People can assign a task to themselves or a task can be assigned to another person. There are many different types of tasks to be accomplished and the type field in the task table will indicate the different types of tasking.

An item can belong to one or many topics, and it can involve one or many people. The role field in Task Person indicates the role a person plays in an item. There will be many different types of roles, and in most organizations, the roles will be called different things, so the roles are configurable and stored in a separate table.

The task items will work whether a person is creating the entries for themselves or whether they are creating events or tasks for other people. If people create a task for themselves, they will enter the data for the task and the role they will have is the person performing the task. The entries will be to the persons Personal Office (the Home page associated with a person's My Office), and there will be an entry in Task Person table showing the assignment of the task. When this person then views their tasks in their My Office desktop, they will see this task. If no one else is assigned the task, and if the task is not associated with any other Leaderboard Topic, this will be the only place this task will show up. If a person assigns a task to a group of people on a Leaderboard, then each of the people will have the item appear in their own task list, and the item will also show up on the group's Leaderboard. There are a couple of items worth noting. First, there is a status field in both the Task Person and Task tables. This is to allow for assigning a task to more than one person. If, for example, groups of people are all assigned to read something, then as they complete the assignment, they can complete the task item in their personal to-do list. We will also be able to roughly figure out percent complete from a multiple tasking by figuring the percentage of assigned people who have completed the task. There will also be the option of completing the task in the task screen. If this is done, then the individual task should be annotated as complete as well.

Second, it will be possible to make each task item recurring. This means that tasks that have to be done on a recurring and regular basis can be entered once and the listing will generate for each occurrence. The recurring table will capture the information necessary to recreate each of the recurring items. There can be a number of different variables when it comes to an item recurring. The table in the database to support this functionality is not finalized to allow the developer to create the recurring feature as they best see fit.

There is a field called attachments in the task table. It is there to designate whether there is an attached file to a task item. While this is not generally, the best database practice we may want to use other flag fields in other tables too, for performance reasons, or we may want to eliminate this field.)



If a person attaches a file to a task that

is not currently in the topic, it will be added to the topic. The file could be located on a remote computer system, in which case the file will be uploaded and attached to the task or calendar event. If the file is already on the system just in another topic, another entry will be made in the topic file table corresponding to the particular file.

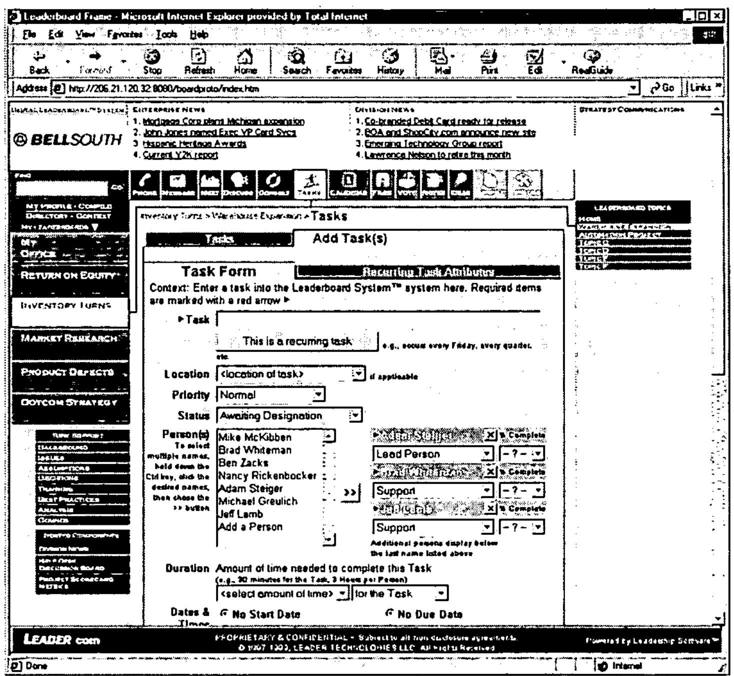
11.1. New Tasks:

Creating a new task will be very similar to creating a new calendar item. The same types of data are required. The following screen mock-up provides an example of the screen a users would see when entering a new task.

One difference is that all tasks have to be assigned to some person. The person field will be a mandatory field. It will also be possible to assign a task to a group of people.

Some tasks may have a due date and if they do it will be entered. Like calendar items, it will be possible to write notes on the tasks.

11.2. Assigning Tasks to multiple people



Tasks can be assigned with an all or any switch. This means that if all is selected then all the people who are assigned the task will have to perform the task before it will be closed. If any is selected then when a person performs the task, it will be closed.

If a task is assigned to everyone on a Leaderboard, then everyone who is currently assigned to the Board will be tasked. If someone new is added to the board while the task is still open, the system will not automatically add them to the task. For a recurring task, that is assigned to everyone, a check will be made when a person is added to a Leaderboard. This will be done to ensure that all people who have been assigned to that board are tasked with the appropriate recurring task.

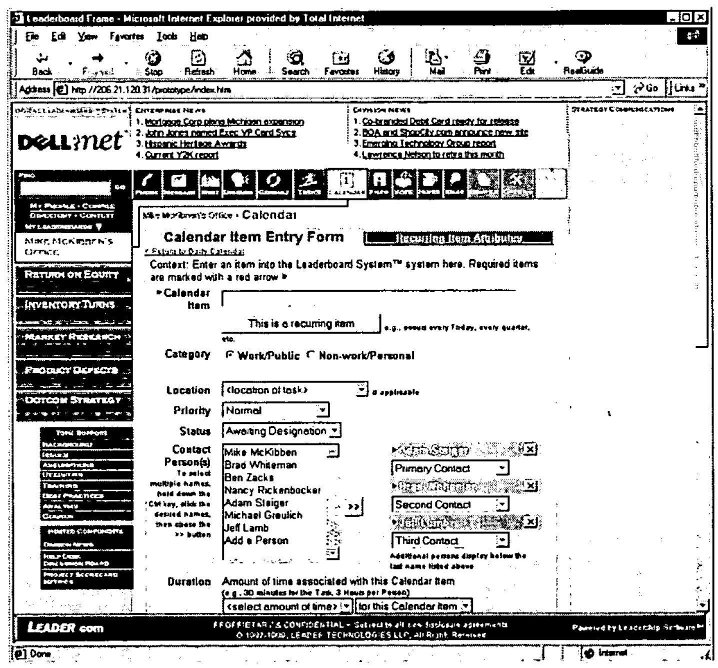
A similar check will be made when a person is removed from a Leaderboard to remove any recurring tasks which might be associated with a particular board.

12. Calendar Items

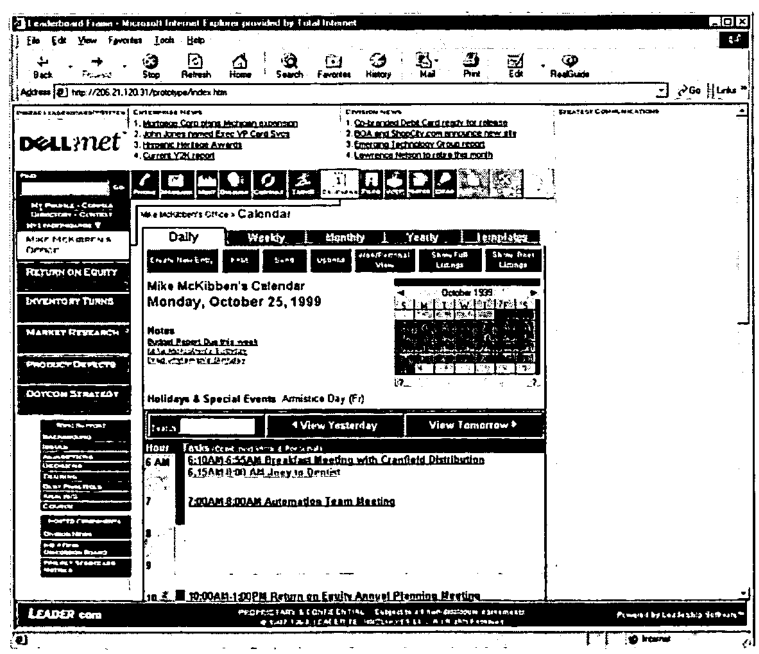
Calendar items are intended to be meetings, scheduled functions, or events that have a time based reference. In essence, any item that would be appropriate to have on a calendar would be included. The calendar table would contain all the information for each of these different types of items. We will just utilize a different screen to input or update the information, depending on what the item is. The type field in the calendar table will indicate the different types of calendar events.

An item can belong to one or many Leaderboards, and it can involve one or many people. The role field in Calendar Person indicates the role a person plays in an item. There will be many different types of roles, and in most organizations the roles will be called different things, so the roles are configurable and stored in a separate table.

The calendar items will work whether a person is creating the entries for themselves or whether they are creating events or meetings for other people. If people create an event for themselves, for example a reminder of a birthday, they will enter the data for the event and the role they will have is the person involved with the event. There will be an entry in the persons Personal Office (the Home page associated with a person's My Office), and there will be an entry in Calendar Person showing the event. When this person then views their schedule in their My Office desktop, they will see this event. If no one else is included in the event, and if the event is not associated with any other Leaderboard, this will be the only place this event will show up. If a person assigns an event, like a conference, to a group of people on a Leaderboard, then each of the people will have the item appear in their own task list, and the item will also show up on the group's Leaderboard.



There are a couple of items worth noting. First, there is a status field in both the Calendar Person and Calendar tables. This is to allow for assigning an event to more than one person. If, for example, groups of people are all invited to a meeting the meeting will appear on all the persons Office boards, and as they acknowledge the meeting the status for that person will be annotated. This will allow a host of a meeting to be assured that everyone who was invited to a meeting was aware of the meeting.



Second, it will be possible to make each calendar item recurring. This

means that Holiday's like the 4th of July can be listed as recurring every year. Meetings can be listed as recurring every day, week, month, or year at the same time and location. Events like paydays can be listed as recurring. The recurring table will capture the information necessary to recreate each of the recurring items. There can be a number of different variables when it comes to an item recurring. The table in the database to support this functionality is not finalized to allow for the developer to create the recurring feature as they best see fit.

12.1. Creating new calendar items:

Anyone with create permission will be able to add a new calendar item. A new calendar item could be something entered directly into a calendar for a person or group to see, or a new Meeting could be created and that would show up on the calendar too. There is more information about creating meetings in the meeting section.

The associated screen mock-up shows the process a person would go through to create a calendar item. A person must enter a Calendar Item name and select the date(s) they would like to have the information on the calendar.

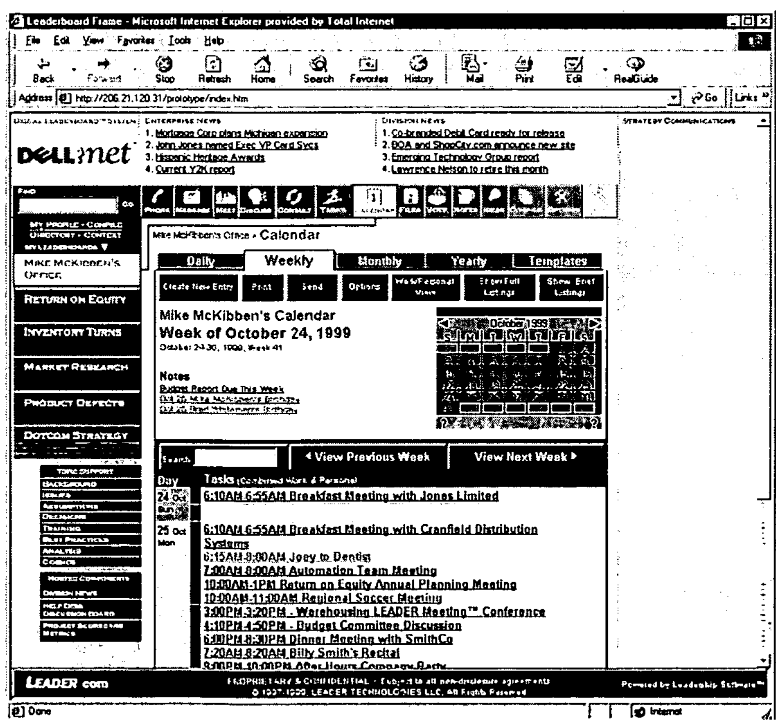
A person can also enter if they would like, a category for the item, location, priority, status, contact persons, duration or start stop dates and times, notes, and any files which should be associated with the item. If the item is recurring, that can also be handled on this form.

12.2. Viewing the calendar:

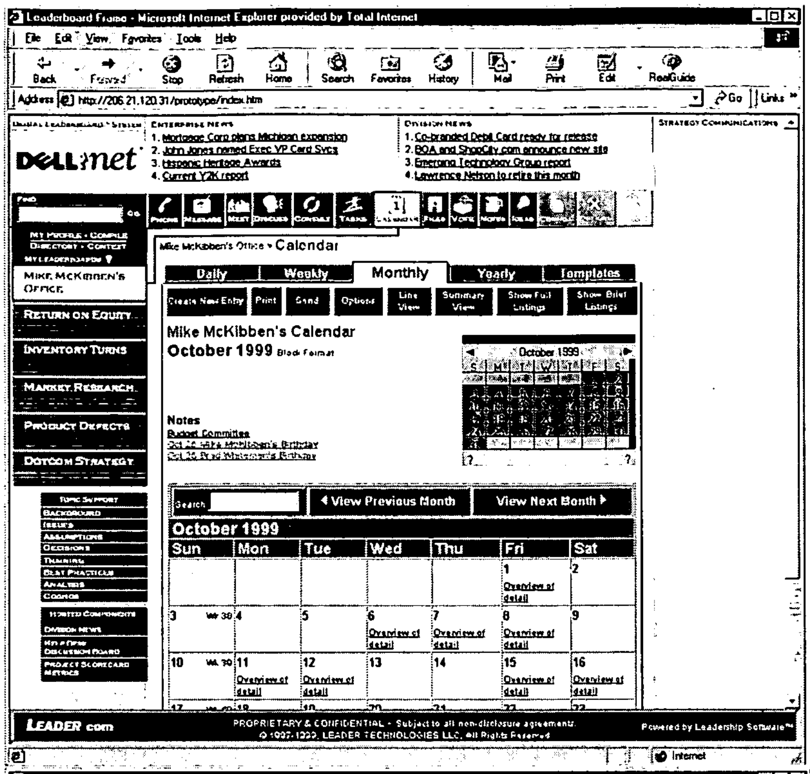
Anyone with read permission would be able to view and read a calendar. There are different layouts for viewing calendars.

The daily view of a calendar is demonstrated at the top of this section.

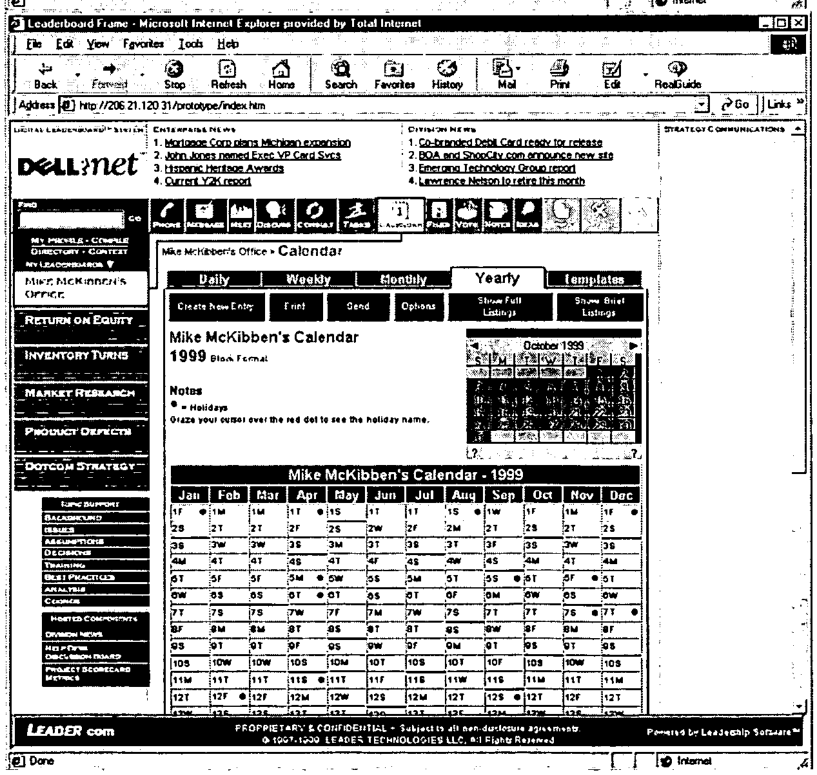
An example of a weekly view would be:



An example of a monthly view would be:



An example of a yearly view would be:



12.3. Templates:

A template is a special type of calendar item. A template can be created to support any group of schedule items that recur on a regular basis, or can be grouped together to create a generic calendar.

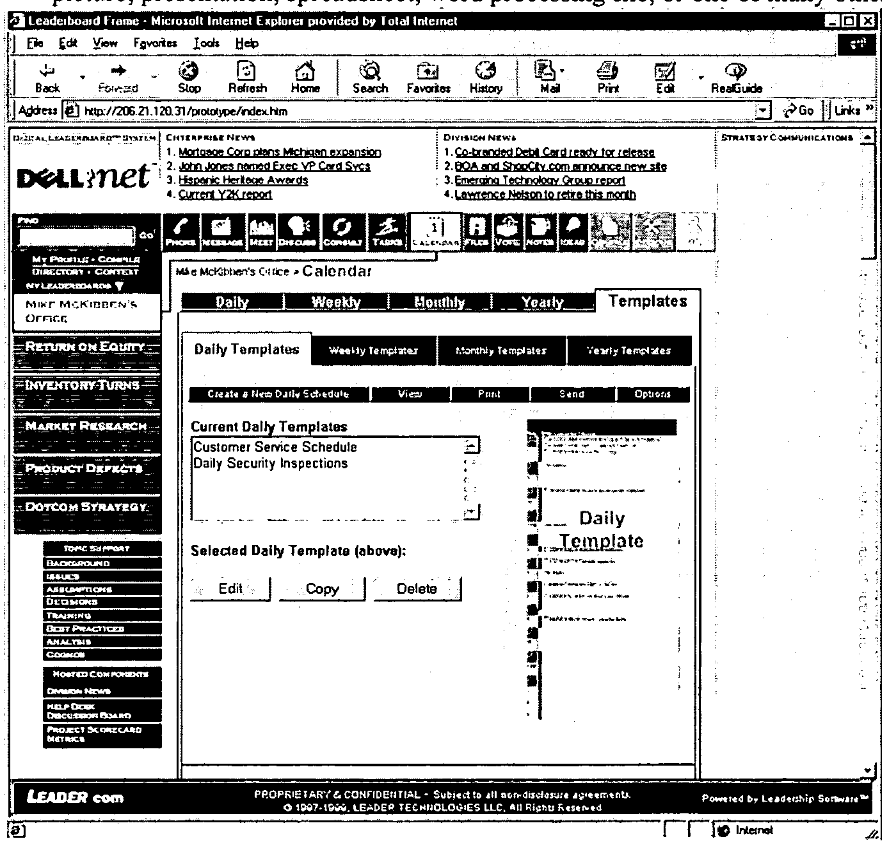
An example of a template could be if there was a particular series of events like an inventory. The calendar items, which make up the whole of the inventory, could be grouped together in a template and reused every time there is an inventory. People new to a job, may have a template created for them, so they can learn all of the events they need to perform in a given day.

Templates will probably be most useful in areas where certain tasks are repetitive but are done on an infrequent basis or in organizations that have high turnover.

In any case, a template groups together a series of calendar items and will apply them to an individual or Leaderboard calendar if requested.

12.4. Attached Files:

If a person attaches a file to a task or a meeting that is not currently in the Leaderboard, it will be added to the Leaderboard. The file could be located on a remote computer system, in which case the file will be uploaded and attached to the task or calendar event. If the file is already on the system just in another Leaderboard, another entry will be made in the Leaderboard file table corresponding to the particular file. Any type of file can be attached to a calendar event. It could be a voice recording, picture, presentation, spreadsheet, word processing file, or one of many other file formats.



12.5. Design Note:

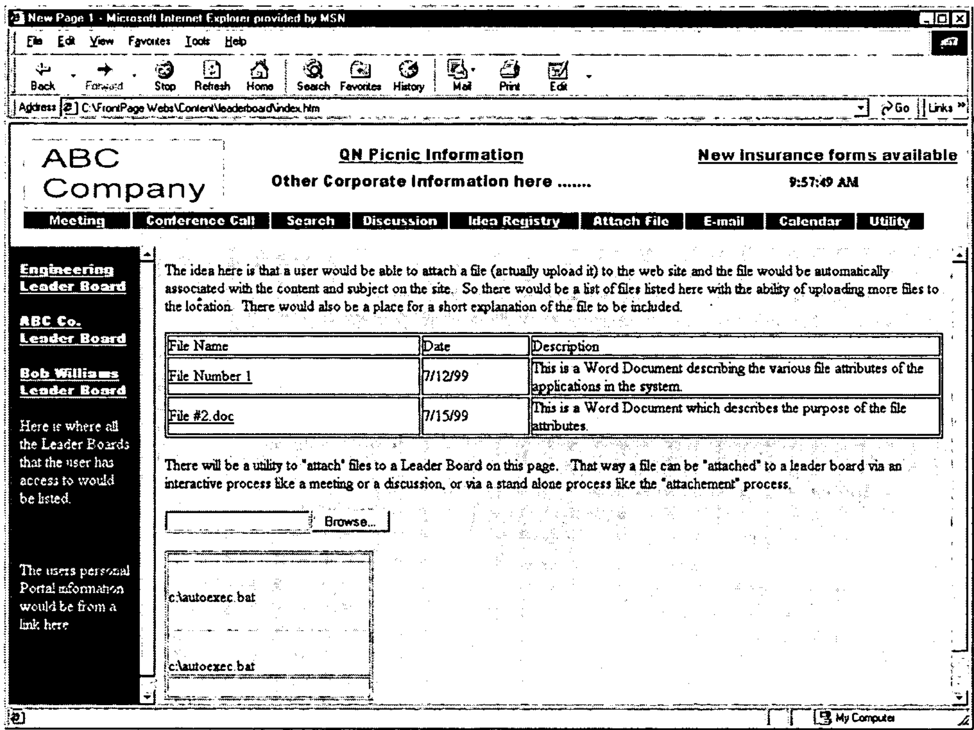
There is a field called attachments in the calendar table. It is there to designate whether there is an attached binary file to a calendar item. While this is not generally, the best database practice we may want to use other flag fields in other tables too, for performance reasons, or we may want to eliminate this field.)

12.6. Merging Calendars

It will be possible to merge different calendars together. Just as a person can select what Leaderboards they would like to see displayed on their screen, they will be able to choose what Calendar's they would like to see displayed together. This functionality will be available on every board a person is associated with. So if a person is setting up an appointment on a particular board, they can also select to view their combined calendar to see if they have any conflicts.

13. Document Filing

The term document filing refers to the practice of relating or associating files with a particular Leaderboard. It is intended to follow the motif of filing a document in a filing cabinet along with the other information, which is associated with that particular document. There are no boundaries to they types of files which can be filed. Even if a person does not have the necessary application for a file on a Leaderboard, they could still upload or download it. In order to avoid any possible confusion with the terms upload and download, they will be avoided in the application. Instead the terms filing and retrieval will be used. So, if a person wishes to associate a file with a Leaderboard, they would select the file button, they will be prompted to select the document or file to associate with the board, and then it will be transferred for them. The intent is to not make it obvious that files are being transferred from computer to computer, but rather to have the impression that a person is working on a single desktop.



The document filing section will display a list of files that are already associated with a particular board with that files description. Any document that has been previously filed, or any file that has been associated with a meeting or discussion will also appear here. The working window will display a scrolling list of files that the user can select to view, edit, upload, or download.

This particular screen example is not a current one, but it still demonstrates the practice of displaying a list of files on a Leaderboard.

The actual file will not be stored in the database. The file will be stored in a common directory on the system and given a nonsensical name. The actual file name will be stored in the database, with a reference to the name it was filed under and the location of the file. The system will also contain the size of the file, the date it was posed to the system, and any notes that a person may wish to attach to the file.

13.1. File Upload

When a file is uploaded, the user will be prompted to enter the purpose of the file. The system will already know who is uploading the file, so it will be related to the person automatically, it will also know which Leaderboard the file is uploaded to. What won't be clear is the purpose of the file and if that can be retrieved from the user then it can be added to the Leaderboard File Description.

When the file is saved to the board the database will be updated with the file name, the description of the file, the size of the file, the date the file was loaded, the relationship to the person who uploaded the file, the board the file was updated on. The file will also be scanned and an index for the file will be created. This will aid in searching for information in the file at a future time.

13.2. File Download

Downloading a file will be necessary if someone wants a copy of a file on their local machine or if they need a copy on a portable media. This option will allow the user to select a file to download from a list of files on a board and then copy it to their browser's machine.

13.3. Viewing or Editing a file

The user will have the opportunity to edit a file that is already on a Leaderboard. If they have the necessary permissions, they will be able to select the edit option on the board and update the file. They will not be able to overwrite the file, however. The updated file will have to be saved to a new filename.

When this option is selected, the file will be downloaded, and then it will be opened for the user with the application the user has associated with that particular file type on their system. In other words, the file will be opened with Microsoft Word if the user has Word associated with .doc files.

Sample file types are listed here:

File Type	Application
.doc	Microsoft Word
.ppt	Microsoft PowerPoint
.xls	Microsoft Excel
.avi	
.wav	
.ra	

LEADER Project Functional Specification

Draft Version 2.2

14. Voting Functionality

An important piece of functionality for a company is the ability to poll employees or coworkers to determine preferences or desires. This might be considered voting or it might be considered a questionnaire but in either case, a Leaderboard will need to support users ability to question and compile the answers from other users of the system.

14.1. Voting

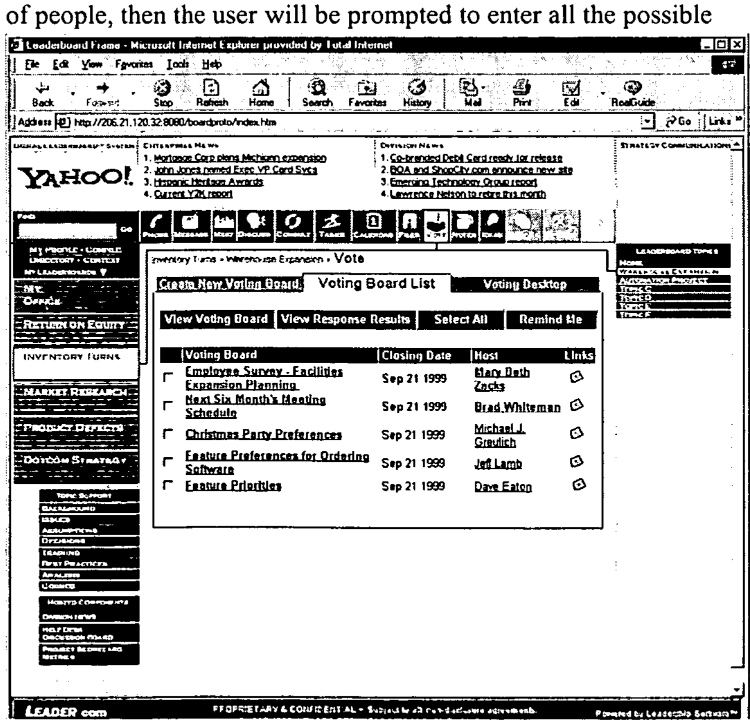
In a Leaderboard, voting is intended to be part of a process where a specific option is selected in a finite amount of time. It might be related to a decision that needs to be made by a group, selecting leaders for some particular task, or any number of other things. It will be synonymous with public elections or private voting for a particular subject or person. In the case of a Leaderboard, the person setting up the voting will need to determine what question needs to be asked, who they would like to pose the question to, and what the possible options are to the question.

14.2. Questionnaire

A questionnaire is a more open-ended approach for gathering information. It could be used for obtaining preferences, it might be used for demographic information, or it could be used for finding out how people feel in an organization. In any case, a questionnaire is a series of questions, which will be generated by a person with a range of responses available for each of the questions. There will be a series of different types of answers available to assist a person in setting up a questionnaire.

14.3. Workflow

A person setting up a voting form or a questionnaire, they will go through a series of steps. The first will be to determine whom they want as participants. The list of participants will initially be based on their personal address book, where they could either select everyone on a particular Leaderboard/topic or individually select the people to participate. If the questions are for a larger audience than for a single Leaderboard/Topic, it will be possible to select people from the global address book, otherwise known as the persons file. When all the people have been selected for the questions, then the specific questions have to be created. They can be of any type or form. They can allow for Yes or No answers, multiple choice, freeform text entry, or different scales in responses. If there are specific answers for a question, such as with an election of people, then the user will be prompted to enter all the possible answers. When the questions and answers are finished, the order of the questions will be determined. A preview of the form will be presented to the user and they can either accept it, or make changes to the content or the order of the questions. When the person is satisfied with all the information, the questionnaire or vote will be submitted and delivered to the participants.



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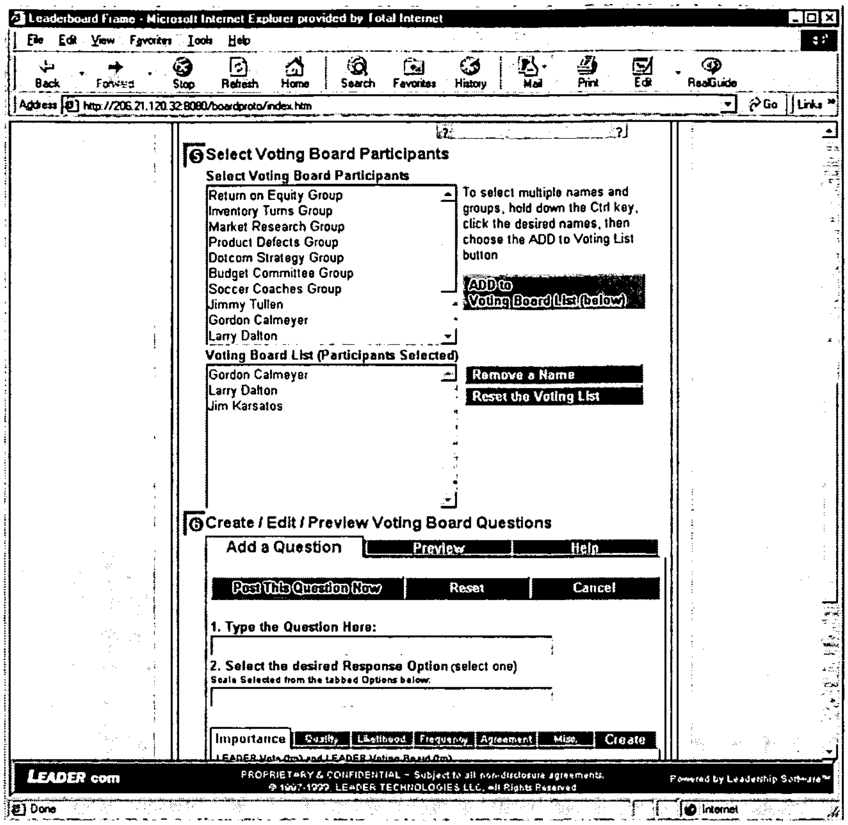
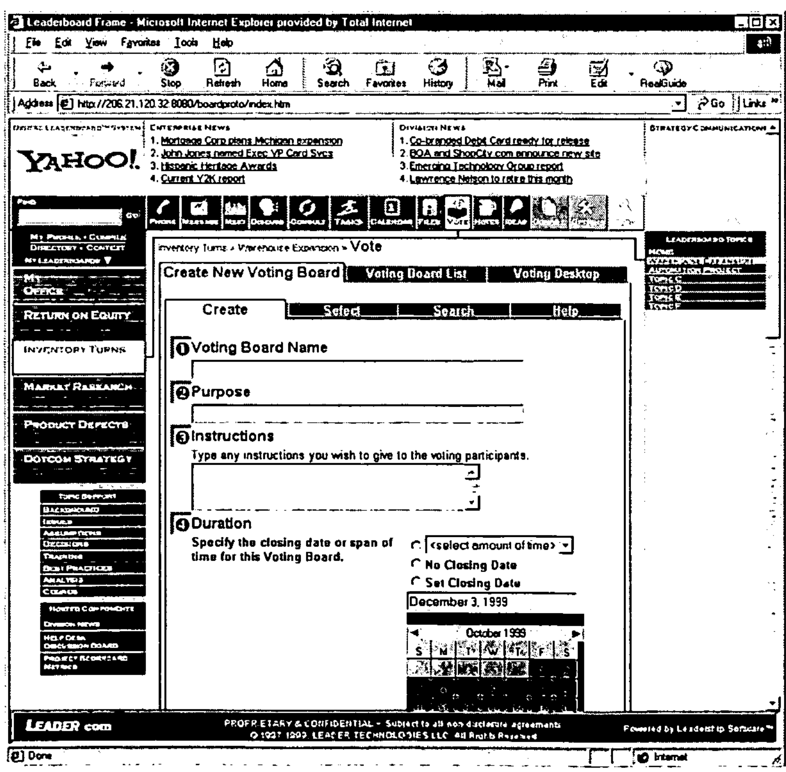


The system will allow for setting up quick votes, which can take place during chats or on-line meetings. If a vote needs to take place in the middle of a meeting, the person requesting the vote will want to setup the vote and have it in as short a period of time as possible. A quick vote function would limit the voting functionality to only the most critical components. It would ask for the question to be posed, and the possible answers. It would go to the participating group of individuals in the meeting or chat by default.

A person would be notified that they were requested to participate in a vote, by having an icon of a voting booth appear in the upper right hand portion of the screen. This would be above the list of topics on a Leaderboard. When the voting booth icon appears, it would signify that a vote has been requested of that particular person. Upon selecting the Voting Booth button, the user will be taken to a list of Votes (or just one vote) that they have been requested to participate in. They will be able to select a particular vote selection and will be taken to the appropriate Leaderboard/Topic to respond to the Question. In the case of a meeting quick vote, the process would take place in a window inside the meeting.



For voting that does not occur as part of a meeting, there will be three ways to access to vote. First, the person could select the Voting Booth Icon from the primary screen. Second, the person could go to a particular

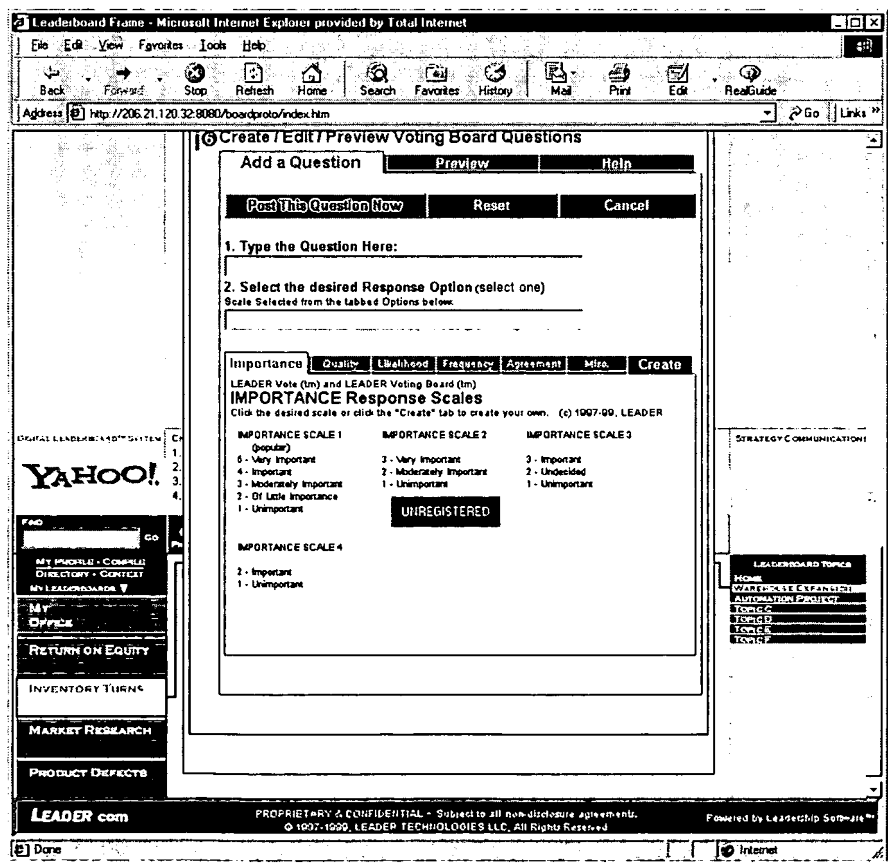
Leaderboard/Topic and click on the Vote button from the One-touch toolbar. Third, the person could do a global compile, and find that they have a vote to participate in and go directly to it from there.

14.4. Scale

The scale information refers to the possible sets of answers for a question. There is a normal group of answers to questions (Yes/No, High/Medium/Low, etc.) and those scales are captured in the system so they can be reused. This will help a person create a questionnaire without having to build it all totally from scratch. There are three components to scale. The scale itself is the list of the particular scales, which are available for use. The Groups of scales are for lumping scales together into like categories so they may be easily found and selected. Scale Options, are the specific answers to the scale. Therefore, a Yes No scale might be part of a Decision-Making Scale Group and it would have two entries in the scale options, one for yes and one for no. A person will have the option of adding new scales to the database, or they could just add their own answers to a particular question. User defined scales will be identified by the type field in the scale table. The possible answers will still be recorded in the scale options table. This is important because the result table will refer back to the scale and scale option tables. It will have a reference to the scale and the scale option as a way to identify, which of the predetermined options was selected.

14.5. Anonymous Voting

It will be possible to hold anonymous votes. There will be some occasions where people using the system will not want to divulge their identity and the person creating the questionnaire will want to allow that. Therefore, when the questionnaire is created, that person will be able to select the option of allowing it to be anonymous. If it is anonymous, the questionnaire will show that on the page when a person is answering the questions. Anonymous questions will not capture a persons user id at all. So the answers to the questions will be captured, but it will not be possible to determine who answered in which manner. In every case, when a user answers a questionnaire, the status field will be changed in the Person Questionnaire table.



It will also be possible to create questionnaires where the answers are public, private, or partially private. In a public questionnaire, the answers will be available to all persons who answered the questions. This will be the default. Private questionnaires, will be ones where only the person asking the questions can see the answers, and finally, in the partially

private questionnaires, the respondents can see the answers to the questions, but can not see any of the filled in text messages.

A given voting questionnaire can be any combination of these options. Therefore, it is possible to have anonymous public voting. In this case, everyone who responds will be able to see the answers but they will not be able to see who voted in which way. Conversely, it will be possible to have private voting, where the respondents names are known to the person who created the questionnaire.

15. Notes

Notes posted to the board can take many forms. There will be instances where some one wished to share information with a group but that information is not associated with an event. They could send e-mail to all the people (which would be stored in a person's corporate e-mail account) or the preferred method would be to post a note to the Leaderboard. That way, any person who visited the board would see the note on the board. There are two primary methods for posting notes. One is to go to a particular Leaderboard and put a note there. This would be a typical way to put a piece of information on a board that a person has access too. If a person does not have access to a board, they could send an e-mail message to the board. It will also be possible to attach a note, in the forma of a sticky attachment, to any piece of content in the system. For example, if a file were associated with a Leaderboard, it would be possible to attach a note to that file and then a quick little explanation of attachment would be connected to that file.

It is not expected that the system will audit or track note retrieval. Therefore, if someone sees or does not see a note, the system will not track that. Traditional e-mail with receipts will continue to be used if a person is interested in knowing that their message was delivered and read.

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16. Idea Registry

The Idea Registry is a way for a person to register their ideas so they can feel free to share those ideas and not have to worry about them being taken by someone else. This registry will provide a way for a person to submit an idea and they will receive a date time stamp notification from the registry acknowledging the submission of the idea. The Registry will maintain ideas as long as the submitter wishes for the idea to stay registered. This is an example of the Idea Registry. The Idea Registry should operate similar to the patent office, in that it provides a way to claim credit for an idea and feel confident that the idea, or intellectual property, has been recorded and saved in a permanent record. This way no one else can claim credit for a particular concept. The intent is for users to feel comfortable in a collaborative environment and not have to fear having an idea stolen by someone else after it was presented in a meeting. The Idea Registry will be a freestanding application separate from the Leaderboard. It will be available for people outside of the Leaderboard environment, but the Leaderboard will provide an interface into the Idea Registry to make it particularly easy to use.

Ideas by nature come in all sizes, shapes and levels of development. They are big, little, important, unimportant, serious, whimsical, fact, opinion, conjecture, speculation, observation, clinical, emotional, valuable, trivial, mature, tested, untested, boring, valuable, useless, important, political, educational, enlightening, dark, brooding, enthusiastic, motivational, constructive, unconstructive, good, bad, mediocre, excellent, formative, exciting, off-the-wall, controversial, pragmatic, practical, impractical, crazy, zany, wacky, funny, serious, critical, explosive, inconsequential, dramatic, well-developed, spontaneous, and emerging, to name but a few attributes.

Innovation thrives on the interplay of ideas and their exchange. In one sense, there are no "bad" ideas since oftentimes the contrast between "good" and "bad" helps to further confirm the "good" ones. In other words, without someone having been willing to share the "bad" idea, the good idea might have remained locked away. Conversely, innovation is thwarted when ideas are bottled up. The sharing of ideas in an enterprise forms the basis for the value of that enterprise, its "intellectual capital."

The Digital Leaderboard™ System, using the **LEADER One-touch™** tools, allows the enterprise in the context of your daily work to capture this intellectual capital in real time. However, some of your ideas may be of special value or potential value. You want to protect your personal interests as you share those. **The Idea Registry™** helps you protect your interests as you share these special ideas whenever they arise and whatever form they take. What are those interests? Such things as copyrights, trademarks, proof of authorship, proof of ownership, date and time stamping, certification, compensation credit, innovation rewards, performance reviews, teamwork and recognition.

The Idea Registry™ allows you to protect your personal interests while simultaneously allowing the enterprise to benefit from what it is paying for: your good ideas. What's yours and what's the enterprise's? Sometimes the dividing line is clear, other times it is not. The Idea Registry™ is intended to make you comfortable in sharing your special ideas for the benefit of the enterprise, which arguably, is the basis of your agreement with the enterprise in exchange for employment. At the same time, it intent is to help you protect your legitimate personal interests with regard to those ideas according to the particulars of your employment agreement whether written or implied.

You need to know some basics about how **The Idea Registry™** works.

1. **PERMANENT RECORD**: It is a permanent record. You can add to it or append a newer version of your developing ideas, but you cannot delete it. It is analogous to applying for a patent: once you have filed, your filing is permanent and cannot be removed.
2. **CONFIDENTIALITY**: The record is stored within The Digital Leaderboard™ System database according to the following rules: who can access it to read it is up to you with one caveat, designated intellectual capital analyst(s) for the enterprise, usually appointed by the CEO, have audit permission to view all entries in The Idea Registry™. In other words, if you so choose, no one will ever see your idea except for the analysts whose professional duty is to maintain the level of confidentiality that you placed on your idea, unless you give permission otherwise.

3. **PROOF OF OWNERSHIP**: It is not proof of ownership, it is merely proof of registry. In other words, The Idea Registry™ makes no value or ownership judgments on an idea, it simply can confirm the date and time you registered content. It remains up to you in conjunction with your intellectual property advisors to make ownership claims.
4. **FIRST USE**: The Idea Registry™ may aid you in copyright and trademark matters in showing proof of "first use" - proof of the first time your idea was used in commerce. However, the particulars of whether or not your use of The Idea Registry™ satisfies First Use requirements must be determined by you and your intellectual property advisors.
5. **SECURITY**: If you upload an idea in the form of a password encrypted file to The Idea Registry™ no one but you will be able to read its contents. This may be useful in R&D, for example, to date stamp in-process product designs. However, this feature should be used sparingly since the primary objective of The Idea Registry™ is to protect then *share* ideas.
6. **EDITING/UPDATING**: If you are editing an idea previously registered, the system will automatically append your changes to the previous entry.
7. **IDEA STORAGE**: Ideas will be saved in the system to maximize retrieval for the owner or any other person the owner requests.

16.1. Workflow

Ideas by their nature are hard to define and categorize. That makes it extremely difficult to decide where an idea may belong. Rather than forcing an owner to select where to put an idea, they will able to select the people they want to have share the idea. From the selection of the people, the system will decide where to store the data.

When a person puts an idea in the Idea Registry, they will be given the option to select the people who will see the idea. The selection of the people will determine where the idea will be saved and where it will be available for display. If the owner decides to share an idea with a Leaderboard Topic users group, then the idea will be placed on that topic board. If people are selected individually from the address book, then the idea will appear only on their individual office boards. An idea can also be published outside of an organization. If the publisher elects to publish an idea to a person who is not a participating member of a Leaderboard, this idea will be placed on a public board where that person can go and access it. That person will also receive an e-mail notification that the idea has been posted for them.

At any time, the publisher of the idea can republish the idea to a larger audience. For instance, a person may wish to share an idea with a small group of people to get their feedback before sharing it with a whole group. In this case, the owner can select the idea in the Idea Registry and publish it again to a different audience. The owner of the idea will also be able to edit the idea at any point. Even after an idea has been published, the idea can still be updated.

Ideas can be deleted and they can remain private. As with actual thoughts or ideas, just because the person wants to have credit for a good idea, does not mean that they know if that idea will work or not. So in the process of doing research, the person may determine that the idea doesn't have any merit and will want to remove it completely, or they may wish that the idea remain private.

When an idea is submitted to the idea registry, a certain amount of information is required. The person's name will be automatically entered, but then they will be asked to enter the subject or topic for the idea and then a description of the idea. The owner of the idea will then be asked to enter the date of the idea. The date that is entered will only be included on the Idea certificate, it will not be the official submission date for the idea. The owner's idea can be acknowledged via e-mail or fax. Depending on which option is selected they can enter the appropriate information.

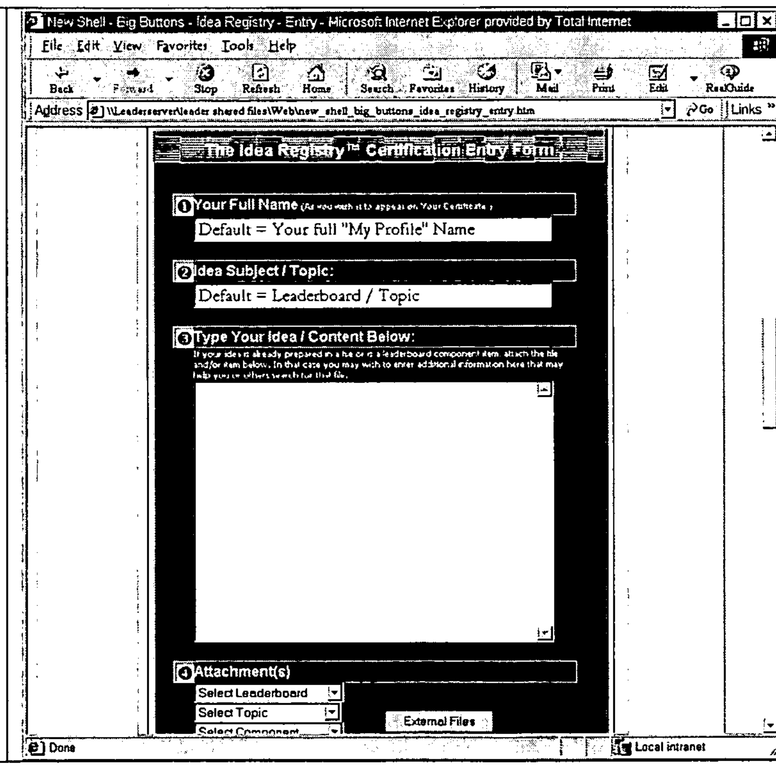
16.2. The Public Idea Registry:

LEADER TECHNOLOGIES will provide a service that will store and maintain ideas from any Leaderboard system. A person may want to have their idea be made public but yet don't wish to publish the idea in an internal company system. The ideas in the Global Idea Registry will be ones that are either directly published there or ones that are sent to people who are not part of the local system.

When an idea is sent to a person outside of the local Leaderboard system, the idea will be posted on a LEADER TECHNOLOGIES Public Leaderboard system and e-mail will be sent to the intended recipient. The system will use the person's default e-mail address when sending a notification, although the owner will have the opportunity to change that address before the message is sent. An idea sent to a specific person will not be available to anyone other than the designated person on the global leaderboard system

If a person selects to have an idea be made public, it will be available to anyone using the LEADER TECHNOLOGIES public Leaderboard system.

16.3. Data Entry

The owner will enter the information about the particular idea.	

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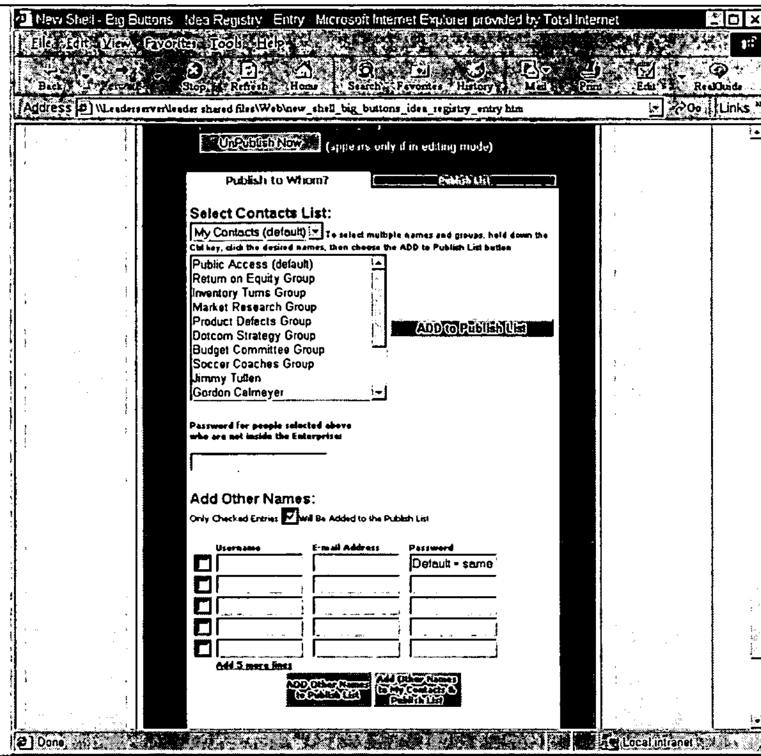
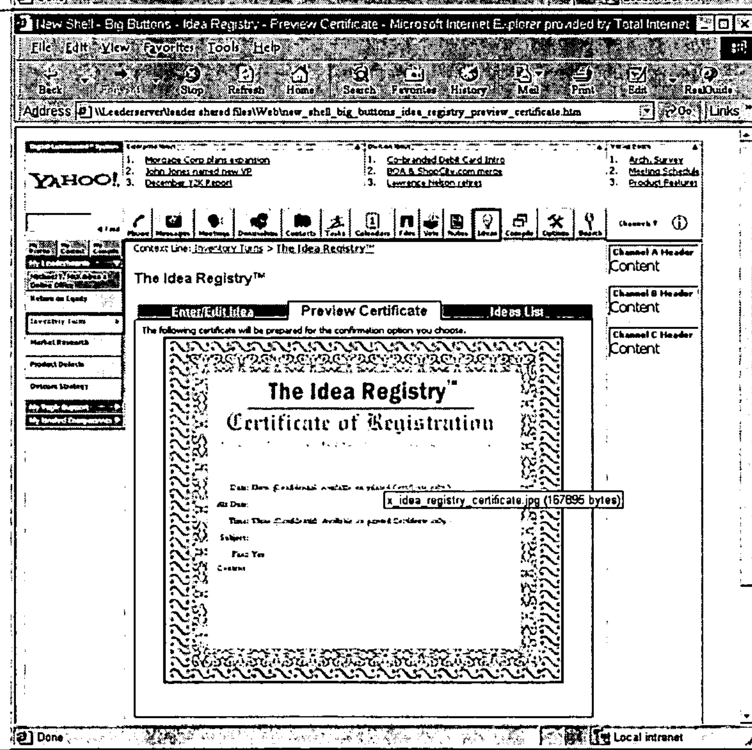
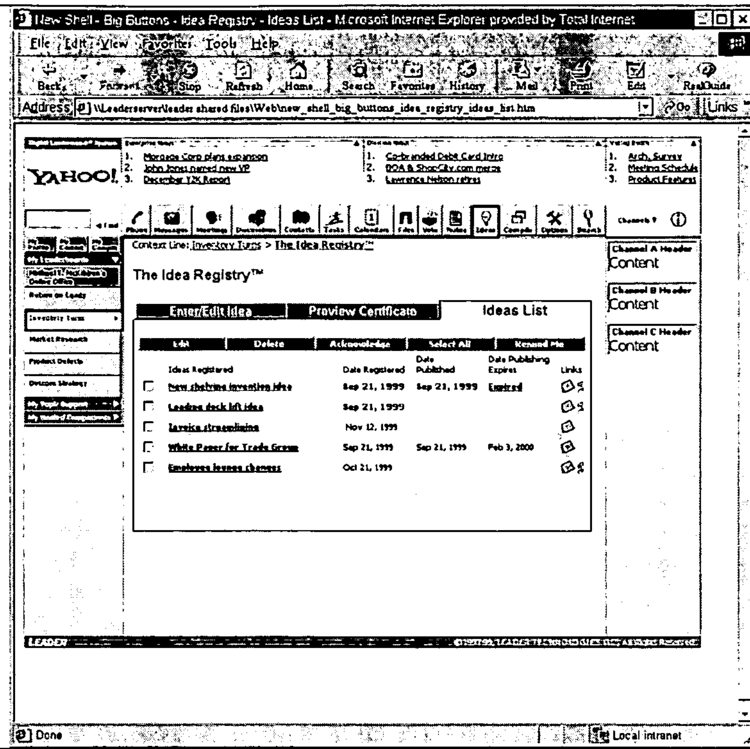
The owner will be able to select who should see the idea.	
The owner will receive acknowledgement of the registered idea.	

This is what a listing of ideas in the registry would look like.	

17. Compiling New Information

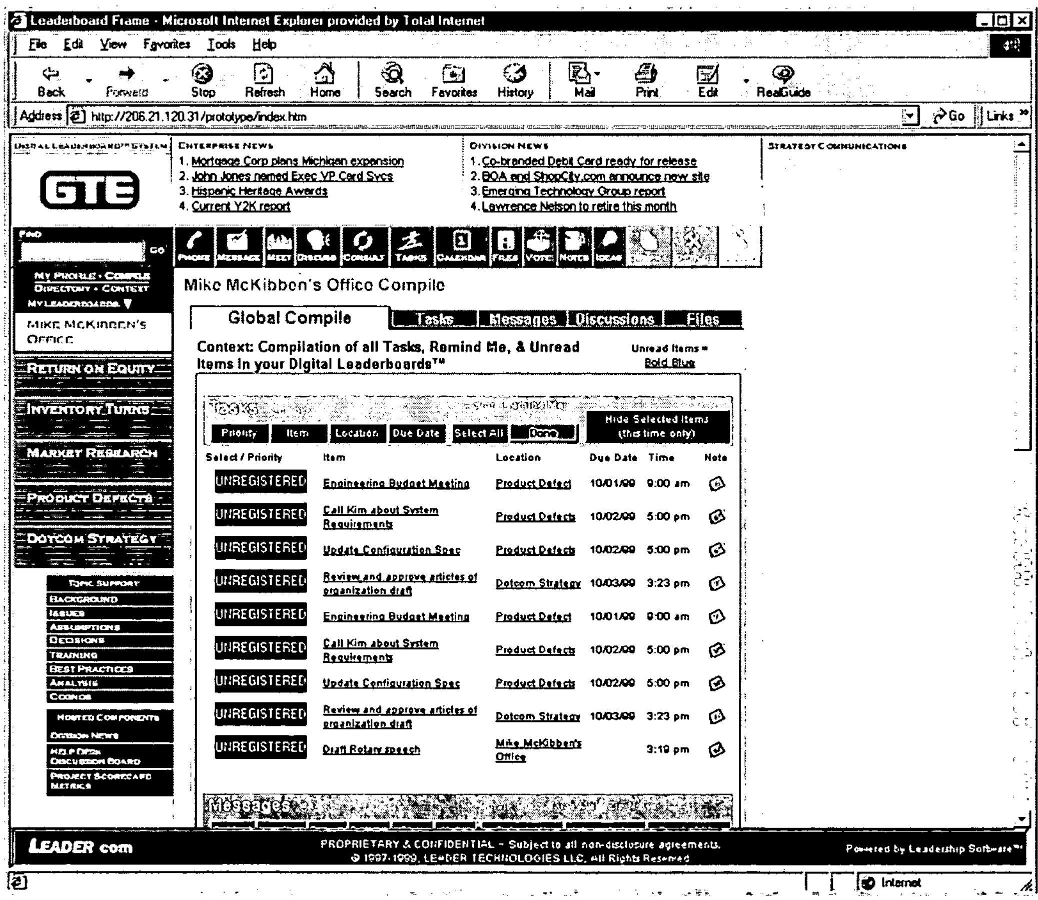
There will be two types of compiles. One is if a person is on a board, and they select compile, they will be presented with all the new information on the board. The other option would be to select a global compile from the global tool options, and this would present the user with a list of all the new items on Leaderboards that a person has access to. The global tools are located in the blue area of the screen where the global search, context, and profile information is located.

The compile option would contain the following pieces of information:

Agenda Items	Meetings and tasks
Messages	Universal Inbox information
Files	Binary Files
Discussions	Discussion Board information
Votes	Questionnaires or votes

The screen would look something like the following:

The idea of this feature is to place all new information for a person in front of them in one screen. This way the person can quickly see all the items that the system has for them, and they can prioritize that work accordingly. This screen introduces 2 new labels for functionality that currently exists in the system. The



acknowledge button allows a user to change the status of an item from new to acknowledged without falsely saying the item has been read. This allows the information to be removed from the users compile screen without actually forcing a person to read everything in the system.

Acknowledging something removes it from new status. So that item will never again appear in a compile screen. If a person wished to quickly change the status of all of a particular type of item, for example files, they could press the Select All button in the files box and all the Files would be checked. Then if the user selected acknowledge, the status for all the files would be changed.

The check boxes beside each option allow the user to select or unselect the specific items they would like to perform one of the specified actions. It would be possible for a person to press the select all button, and then unselect certain items, by unchecking the boxes next to those items.

The create reminder button creates an entry in a person's task list. The task would specify to perform whatever item was selected for reminder. So, if a person selected a discussion item titled "Engineering Procedures", and then pressed create reminder, they would be taken to the create a new task function and they would create a task with the default being to Read: Discussion Engineering Procedures. By creating a reminder for something, the item status is changed from New to acknowledged, and an entry is put in the Task list.

If an item is selected, the user will be taken to the appropriate location for that information. So, if a person selects a file on a particular Leaderboard, they will be taken to that board with the files toolbar option selected. The status of that item will be changed from new to read.

If an item is left untouched, its status will not change and it will still be displayed on the list.

The reasoning for having this functionality and handling it in this particular way, is to present a person with all new information either on a particular board, or globally on any board they have access to. Creating this screen could present an overwhelming amount of information for a person, so it is necessary to reduce the items on the list to only the most important ones as quickly as possible. The process of narrowing down the list of new items to only those that are most important to an individual person is best left to that individual person, so the best we can expect to produce is a set of tools which will facilitate this process.

18. Administration

This system will have a number of support functions, which an administrator will be able to perform. A host will want to move data from the active Leaderboard to an inactive status. This could either be done at the completion of the project or the end of a quarter, Fiscal year, tax year, or any point in time. The host will be able to select a high level function, like a date or a person, and they will be able to archive all that data off from their board and into their archived or historical board. Once the data is moved it will be deleted from the active Leaderboard. This way a person's data will exist either in the active board or the archive board.

The Librarian application would also be located here. The Librarian would allow a person to view (checkout) information that has been submitted to the Library. The Library is a concept that may not be implemented in this version. It is intended to be a place where information that has been archived off of a Leaderboard is accessible to users until such time that it might be permanently purged from the system.

Future considerations: Other miscellaneous tools could be added here, for example, a calculator, or a timer, or any number of other tools.

18.1. Personal Preferences

There are a number of different parameters a person can choose to customize their Leaderboard.

Option	Description	Values
Sticky Leaderboard	Defines whether the person starts with a particular Leaderboard everytime they use the system or whether they are returned to the last Leaderbaord they were on.	Y or N
Desktop Motif	Defines the type of display look and feel a person would like to have for their system	Various
Custom Leaderboard Display	Does the person have a custom Leaderboard Display Defined.	Y or N

18.2. Selecting Display Options

A user of the system will have a series of screens where they can customize their Leaderboard displays.

Screen	Purpose
Display Options	This screen will be used to select the various display options for an individual user.
Leaderboard Security Options	This screen will be used by a Leaderboard Host to designate which users have particular access to specific Leaderboard tools.
Archiving	Archiving information on a Leaderboard.

18.3. Archiving

Information will not stay on a Leaderboard forever. At some point the host or another designated person will want to remove information from a Leaderboard. The information may still have value in terms of history or trend information so the information should not be deleted but rather captured to an archive board and taken out of the way for day to day business. Some information on a Leaderboard can be deleted by select users (at a minimum the host) but that is a permanent removal of information.

18.4. Security

The individual owners of the boards will primarily handle security on a Leaderboard. They will be responsible with granting (or revoking) access to any other member of an organization. A person can grant any other member of the organization access to a Leaderboard where he or she has security access.

18.4.1. Leaderboard Security

Access to Leaderboards will be managed at the tool level. What this means is that a person can have access to all or part of a Leaderboard. For example, the host of a Board may grant Read and Write access to another person to the Files portion of a Leaderboard. This means that the Leaderboard would show up for that person when they access the system, but the only tool that would be available on that board would be the files tool.

When a person is granted access to any portion of a Leaderboard, that board would then become available to them on their main desktop.

The following are the types of access available for a Leaderboard:

Access	Rights
Administration	The user has the authority to update all information on a Leaderboard.
Operation	This user will have the authority to read and write to all files and update the Universal Inbox.
Write	This user has the authority to update all files on the Leaderboard, but does not have access to the Universal Inbox.
Read	This user has the authority to view all files on the Leaderboard, but does not have access to the Universal Inbox.
Audit	Read-only access to all data on a Leaderboard.
Delete	This user has the authority to delete files from the Leaderboard

In addition to these types of access on Leaderboards, there are also types of users. Specifically, there are members and non-members. This is done to provide a quick way to differentiate the people who have access to a board from the people who are using the board to conduct business.

18.4.2. Leaderboard Tools

The tools a person can have access to on a Leaderboard are:

1. Phone
2. Messages
3. Meetings
4. Discussions
5. Contacts
6. Tasks
7. Calendars

8. Files
9. Votes
10. Notes
11. Ideas
12. Compile
13. Options
14. Search

18.4.3. Leaderboard Content

It will also be possible to give someone access to a piece of information on a Leaderboard by creating a link between that information and a person's individual board. So if the host of a board wanted to have a person participate in a discussion on a Leaderboard, that person could be added to the discussion at the component level, and the component (or content) would then appear on the person's Office board.

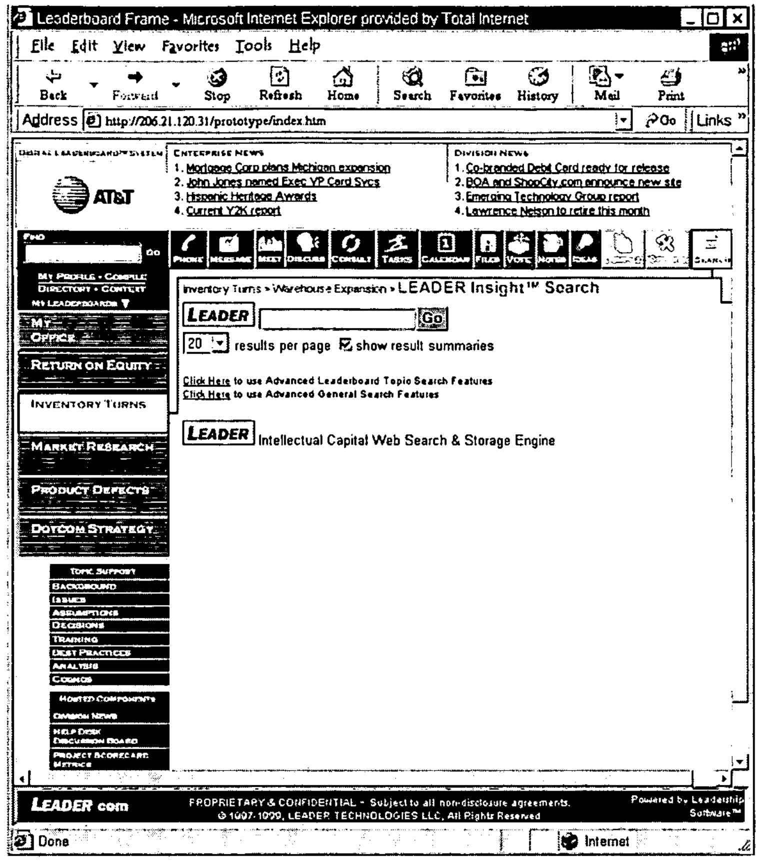
18.4.4. Organizational Security

There will be some organizational security in the system as well. Specifically, the organization may require an auditing function. Auditing or oversight would be supported by the audit access permission. Audit permissions can be granted on a board by board basis, or globally for all a companies Leaderboards.

A Company will have to have a system administrator for the whole system to manage global access controls.

We expect that access to Leaderboards will be granted to people who are outside of a particular company. If this outside agent is providing functional expertise we refer to them as a Luminary. They would be a subject matter expert given specific access to a Leaderboard or a series of Leaderboards.

19. Searching



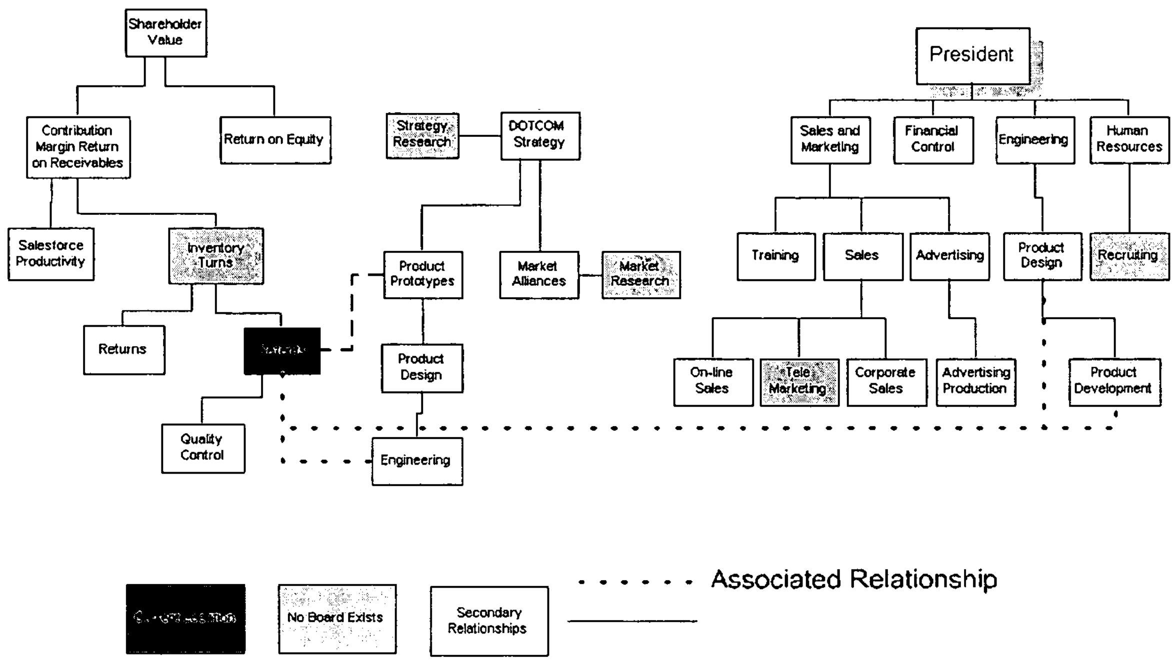
Searching for information is one of the fundamental ways to get information on a Leaderboard. The search option will allow the user to select key words to search on, as well as how broad or how limited a search they would like to perform.

The users will have the options to limit searches to only one Leaderboard (the default), all Boards, only the current application (Meetings, documents, calls, etc.), or only files associated with themselves or all users. This will allow the user to limit their search range and speed up their searches, or maximize the number of options on the search.

The searching results will be displayed in a scrolling window and the user will be able to select any of the items and view them on-line. All selections will be opened with the application that is associated with it. For example, if the information selected were from a meeting, the meeting application would be used to open the meeting and view the contents.

20. Context Diagram

The purpose of this functionality is to allow a user with a single click to be able to see the context for their work within the whole organization. It would not only show how the person fit in organizationally but also in terms of strategic drivers for the company and workflow. The context diagram would show the current location for a user, the primary relationships for them on the board, the secondary relationships, and the associated relationships. In other words the diagram would put the work a person is doing into the context of the overall company.



Context Relationships September 25, 1999

Leaderboard version 1.0

Companies are obviously dynamic and no two companies are structured exactly alike. So to capture the data necessary to create this diagram, we will need to have a flexible structure. This structure will have to be capable of keeping the information about every Leaderboard, and the structure of the company, to include whether there are Leaderboards or not, the workflow of the company, and then the strategic drivers of the company. It will also have to maintain the relationships between each of these particular elements.

Context Diagrams will be built in a batch mode rather than trying to create them whenever they are requested. The diagrams will be stored in the database in the Web Board table. Each Web Board will have a unique context diagram. These diagrams will be created off line so as not to put too much of a delay on the responses.

20.1. Web Board Relationships

A Leaderboard Web is a grouping of Leaderboards into some set of relationships. It is this set of relationships that will be used to create the context for a person. A single Leaderboard may belong to any number of different webs or it may not be in a web at all. A web can signify the company

organization structure or it could signify the workflow for a company or it could represent the strategic drivers for a company.

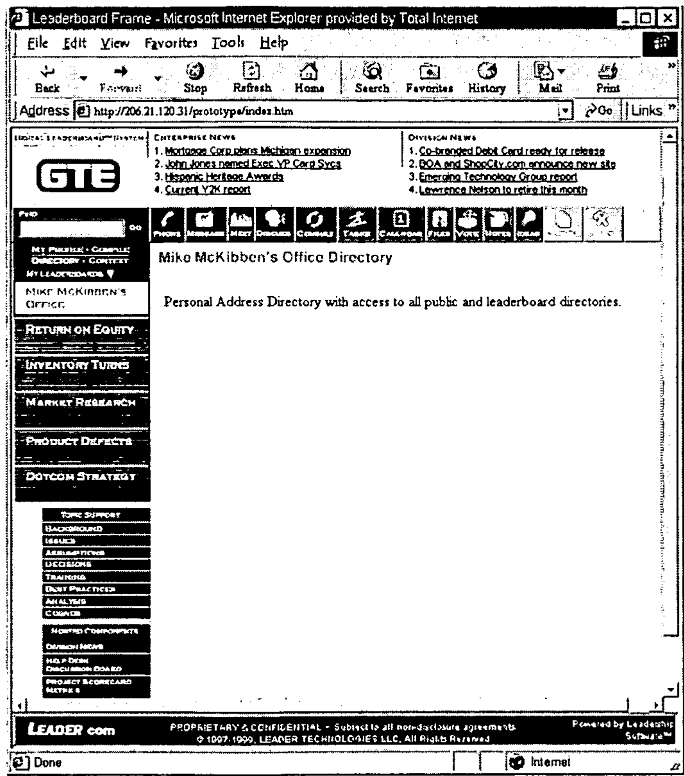
The relationships between the Leaderboards will be captured in the Web Board Relationships table. This table will contain information on how each node (or Leaderboard) relates to another node. Types of relationships are parent, child, secondary, or tertiary. Any relationship between nodes will be maintained in this table. It will be possible to expand the information in the table in the future if an organization wishes to capture relationships in a slightly different way. This information will be used for building the context display for a Leaderboard, and it will probably also be used to support some queries in the system.

The table Web Board type is to identify what type of web board it is. For example, in an organizational web, the web board may be a department, division, or any number of other types of distinctions. This table will have the types of boards identified. The board type code will be stored in the Web Board table, and the types will be identified in the Web Board Type.

21. Company news and information

Company news is the general information that a company needs to get out to its employees. Many methods have been utilized over the years, newsletters, bulletins, intercom announcements, global e-mail and the like, but none of them have been able to adequately get the word out quickly to all the people in an organization and keep track of who has received it and who has not. The Leaderboard system will support corporate news by putting messages in the upper portion of the screen, in a prominent location for all people to read.

We need to put a lot of information on the screen with this application, so we need to be judicious with our use of screen real estate. We don't want to continue to display information to a person if they have already read it. We want to keep track of all the people and the messages they have read, so it makes sense to check to see if all the messages for a person have been read before displaying the Leaderboard screen.



Once a person has read the items, then the information is just taking up space on the screen. So we need to be able to have a preference which says the news feature will be minimized when all the items have been read. This will ensure that the information is in fact getting out to all the people while it supports the need to efficiently utilize screen space.

The news information will be stored in a table that will be linked to a special kind of Leaderboard. A company Leaderboard will be one of the unique types of Leaderboards. Company Location will be another. These two boards will have news items associated with them, and they will be annotated as Company News boards. The news items in the tables associated with these boards will be displayed at the top of the Leaderboard screen for the appropriate employees. In the Internet version of the Leaderboard there won't be any company information to display this area of the screen will contain advertisements.

In a company Leaderboard system there will be at least one set of news. That will be the company news. It will also be possible to have a second set of news displayed on the main screen. This can either be the company location news, which is the default, or it can be another board entirely that also has news on it. In all cases, the information will be created by a news editor and it will be displayed at the top of the screen for all appropriate users. For a company, all users corresponding with the company id will be associated with the company news and all the users who have the appropriate company location id will be associated with the company location news. The news editor will be allowed to create a title for the news piece and that title will be what will appear in the space at the top of the screen. Three news items will be displayed in the space at the top of the screen for both company and company location. If there are more than three items to display, then a more indicator will be displayed.

Every entry in the news table will have multiple entries in the Person News table. These entries will be created automatically as the news editor creates or changes the news items. When an entry is made in the news table, all the corresponding entries will be made in the Person News table depending on whether is a

Company Location news item or a Company news item. The entries will be based on the company id or company location id in the Person Table for each person.

The Person News table will be used to maintain a list of all the items a person has available to read and the status of whether they have been read or not. One of the personal preferences is to select to not display news items that have been read. So, if a person reads a news item, that item can be removed from the display and the person will save that much additional screen real estate.

The News table is used to contain all the actual news messages. A news message can be any kind of message a news editor would like to convey to the users of the system. There are no real limits to the type of information that can be shared.

The editors of the news items will be able to edit the information from inside the system. They will be provided with a separate button that will take them to a rudimentary editing screen. From this editing screen, they will be able to enter text to be displayed or cut and paste information that will be displayed.

22. Leader Channels

It will be impossible to anticipate all the possible inputs to information in a Leaderboard system. By default, the system supports inputs by Leaderboard. It does not support any more general information flow from say a wellness committee or safety organization. To allow for organizations like that and many others that we can not predict, we need to offer companies the ability and location to provide their employees with diverse and perhaps dynamic information.

In a general sense, a Leaderboard is a place for multiple people to share information. A Leaderboard will take various forms and will serve multiple functions. One of the functions it will perform is that of a channel.

A Channel is a type of Leaderboard. The difference is, it is one way communication from a person or group of people to one or many other people. It is possible for a Leaderboard to operate as a board for some people but be a channel for other people. For example, a Wellness board could have a group of members who share ideas and propose content. Then there is a push of content out to all employees in an organization.

A channel is very similar to a news item, in that it is a way for a person or organization to get content out to designated people.

People are associated with a channel by the host of the channel. The host will select groups of people by associating a Channel with a Leaderboard or Leaderboards(s). When this occurs, all the people who are associated with a particular board will be added to the Person Channel.

If a person is associated with a Leaderboard as a Leaderboard, it will be displayed on the left-hand side of the screen. If the association is as a channel, the display will be on the right hand side of the screen. The purpose is to quickly and intuitively distinguish between different types of content for people.

Some channels will be subscription based. This means, that a person will need to either select to be a member of a channel or they will need to select to be removed from a channel. In either case, whether a person is a member of a particular channel will be that person's choice. Subscriptions channels are created and designed that way by the host of the channel.

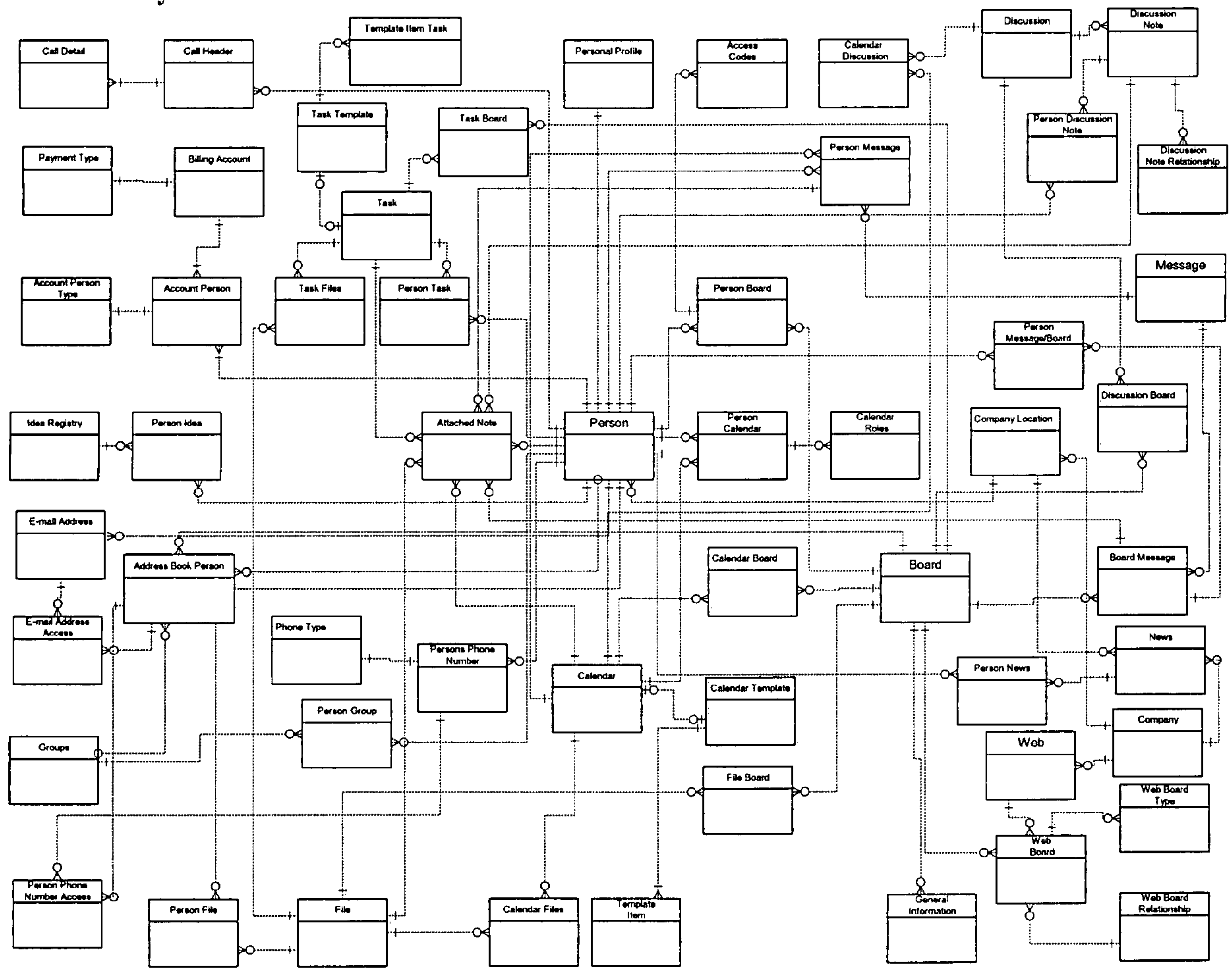
23. Database

The database will be designed in such a way to maximize the relationships of information. There is no single prescribed company organization, nor is there a single approach to supporting companies, so there can not be a predefined database schema, which will be used by all companies in the diverse ways they do business. The LEADER database schema is created to be flexible enough to support the relationships between the events where information is created, and the people who are responsible for the information. In other words, it is not created to support a predefined business process, but rather the information needs of the business process. The schema has virtually no mandatory relationships for this reason. All data can be optionally related to each other.

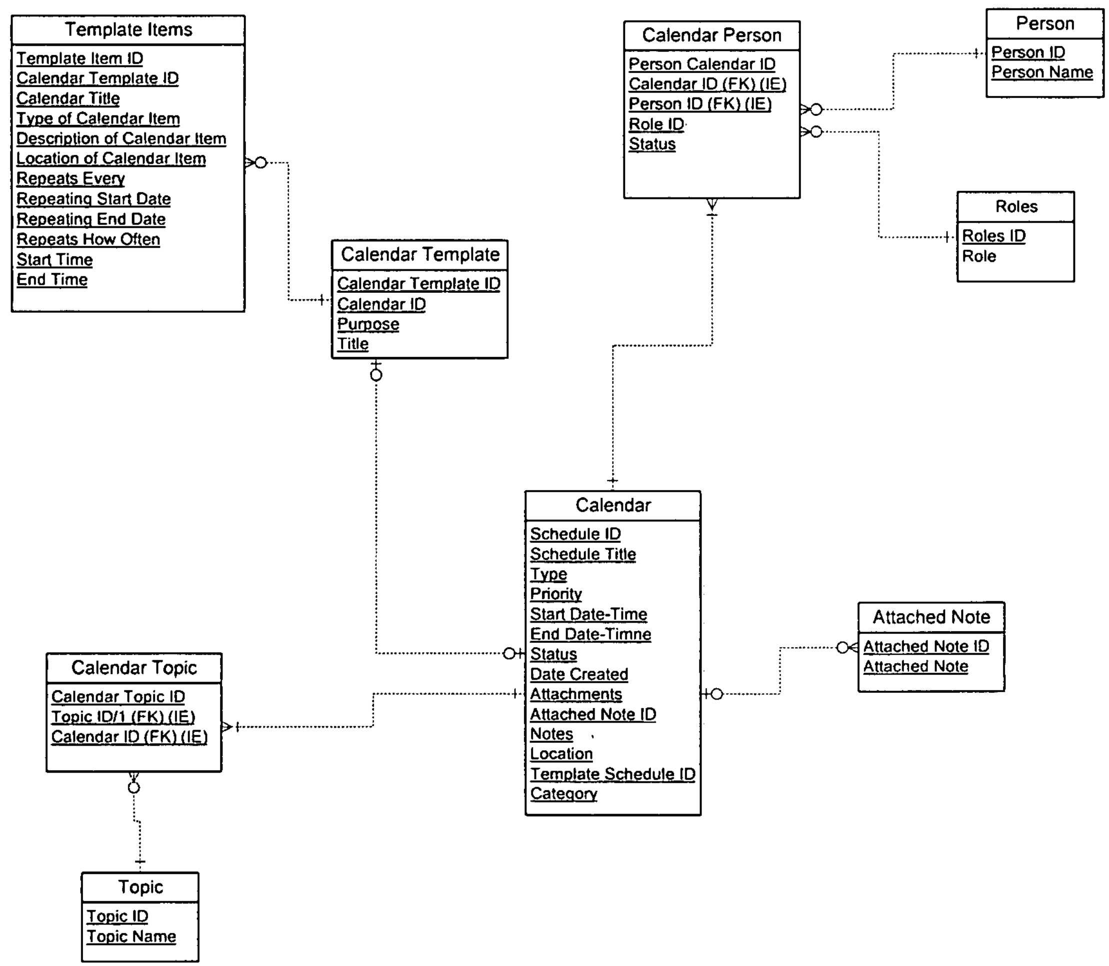
One of the key components of this is a link table. This table will contain all the relationships between the component pieces of a Leaderboard. In other words, any relationships between, Message, file, meeting, call, discussion, board, or notes will be kept in this table. This table will only have the key information from each of the components it is relating together and the unique key for the link table.

24. Leaderboard ERD

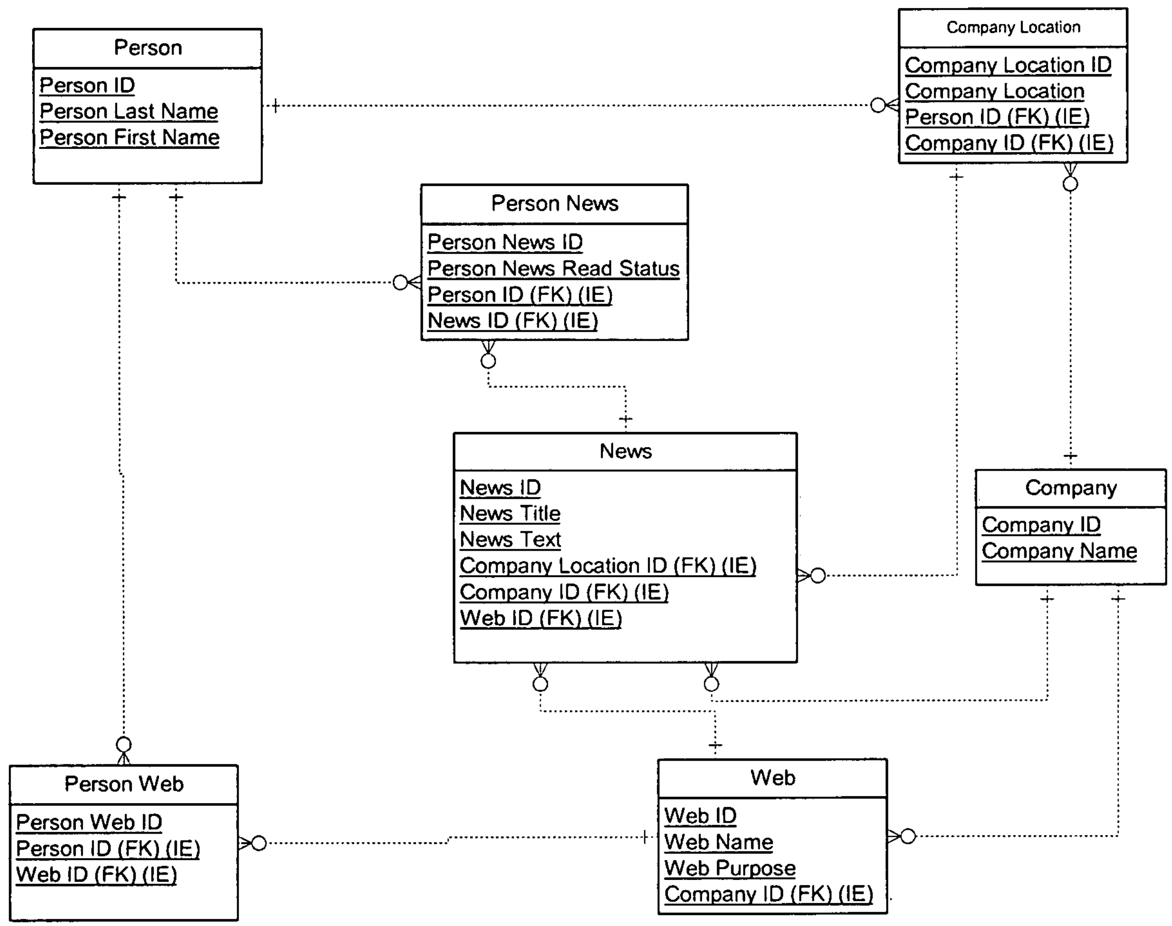
24.1. System ERD



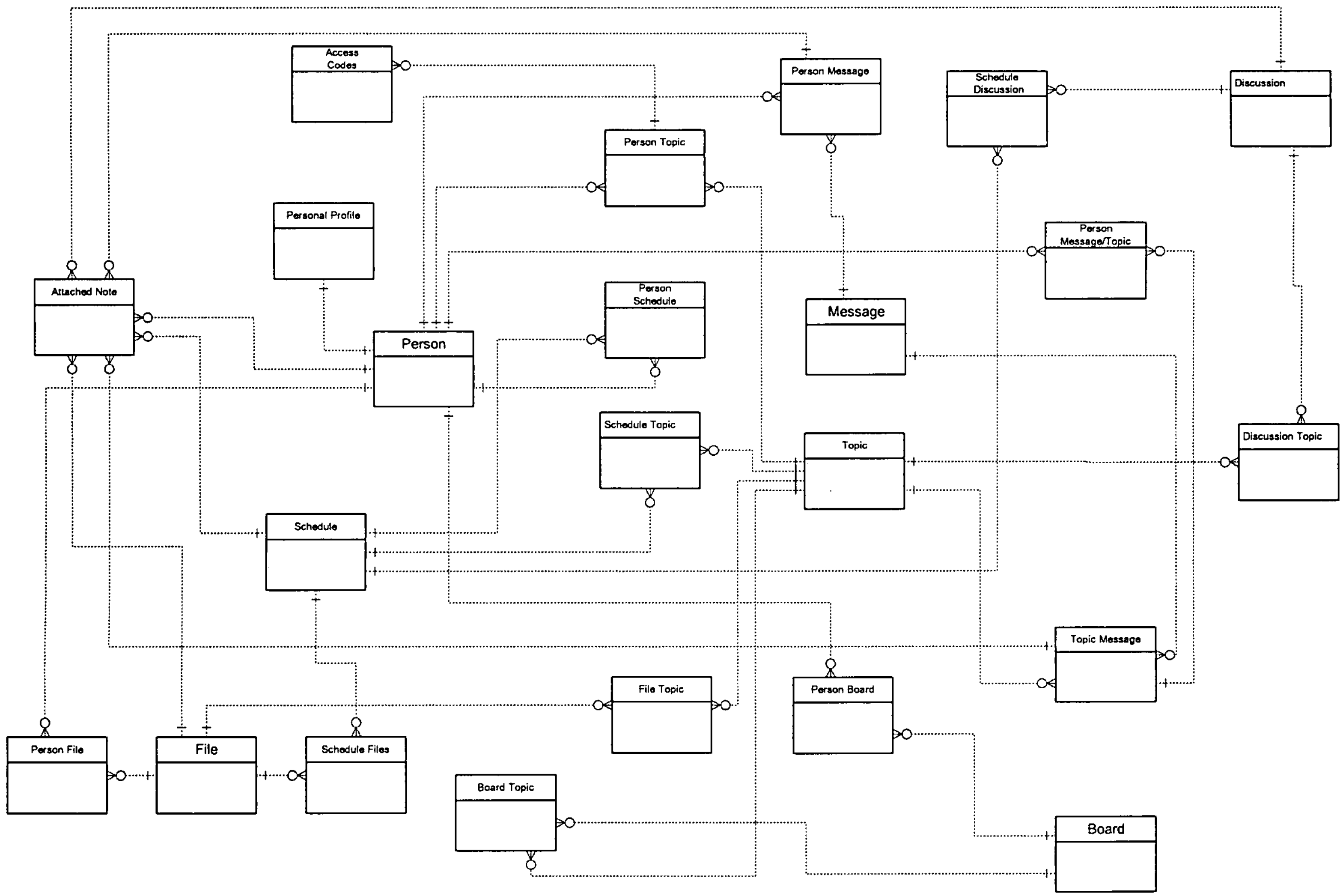
24.2. Calendar



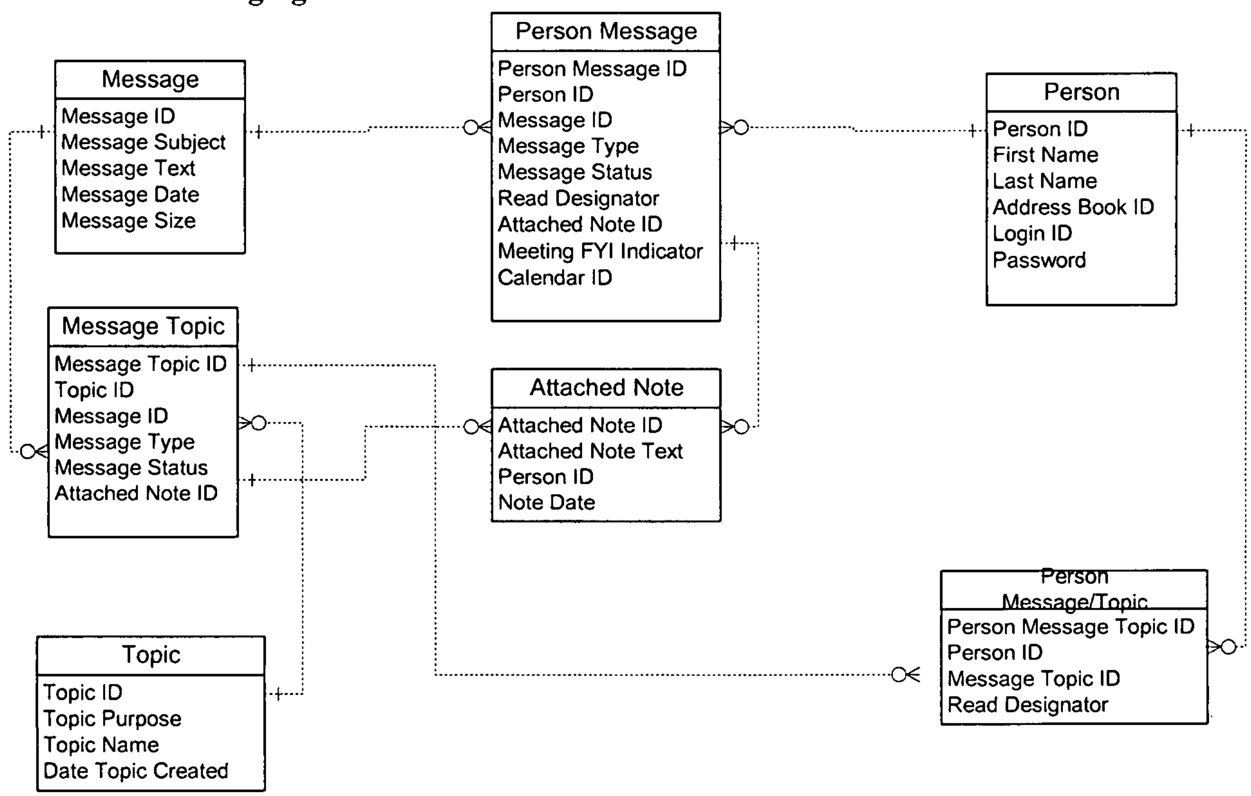
24.3. News


Person
Person ID
Person Last Name
Person First Name
Company Location
Company Location ID
Company Location
Person ID (FK) (IE)
Company ID (FK) (IE)
Person News
Person News ID
Person News Read Status
Person ID (FK) (IE)
News ID (FK) (IE)
News
News ID
News Title
News Text
Company Location ID (FK) (IE)
Company ID (FK) (IE)
Web ID (FK) (IE)
Company
Company ID
Company Name
Person Web
Person Web ID
Person ID (FK) (IE)
Web ID (FK) (IE)
Web
Web ID
Web Name
Web Purpose
Company ID (FK) (IE)

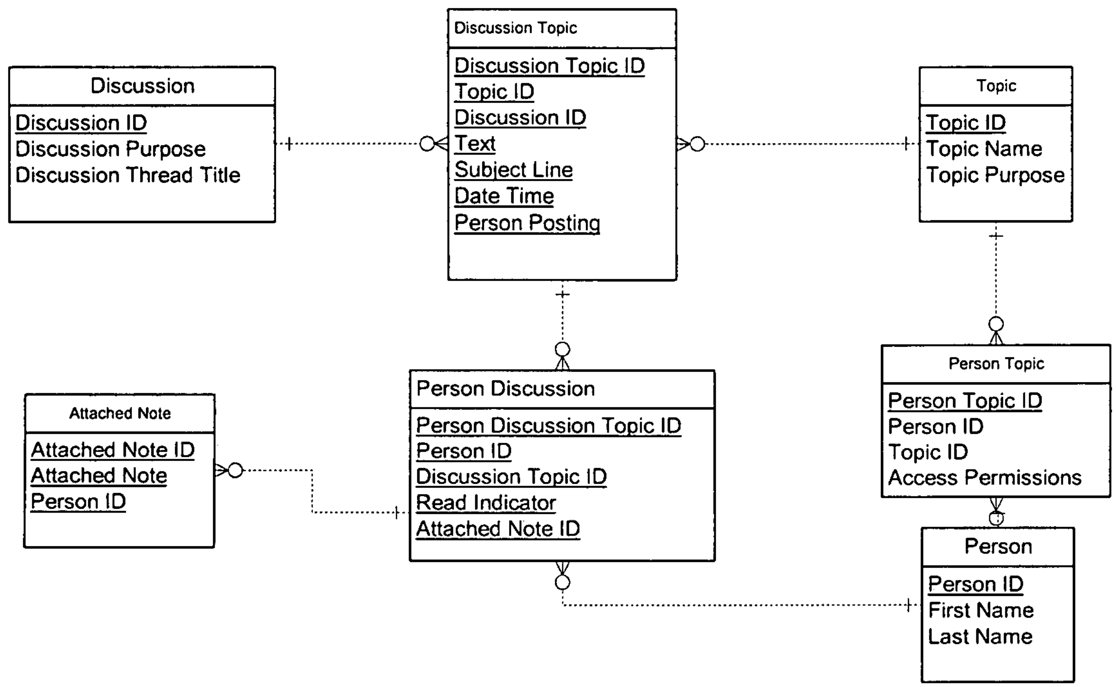
24.4. Compile ERD



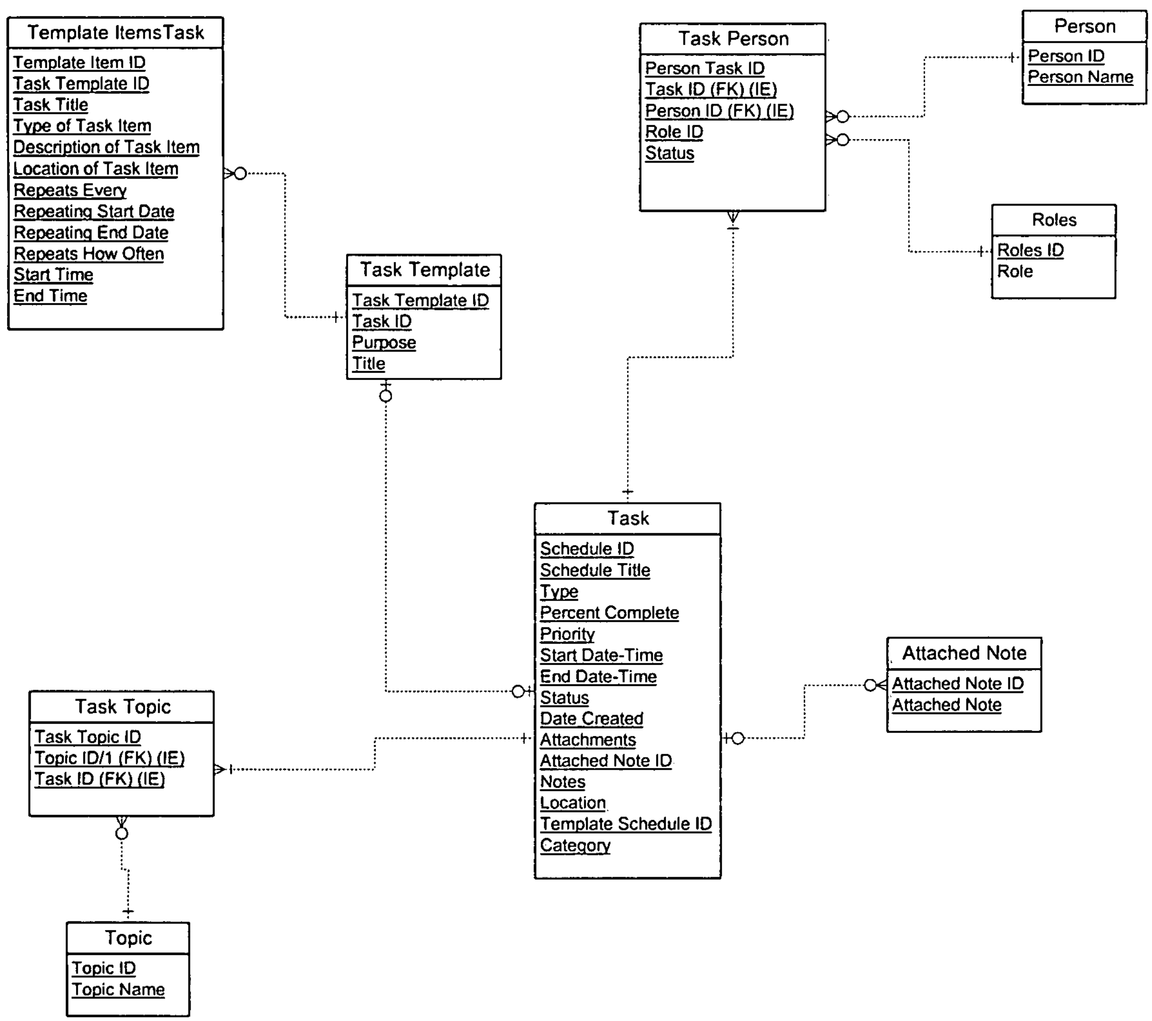
24.5. Messaging



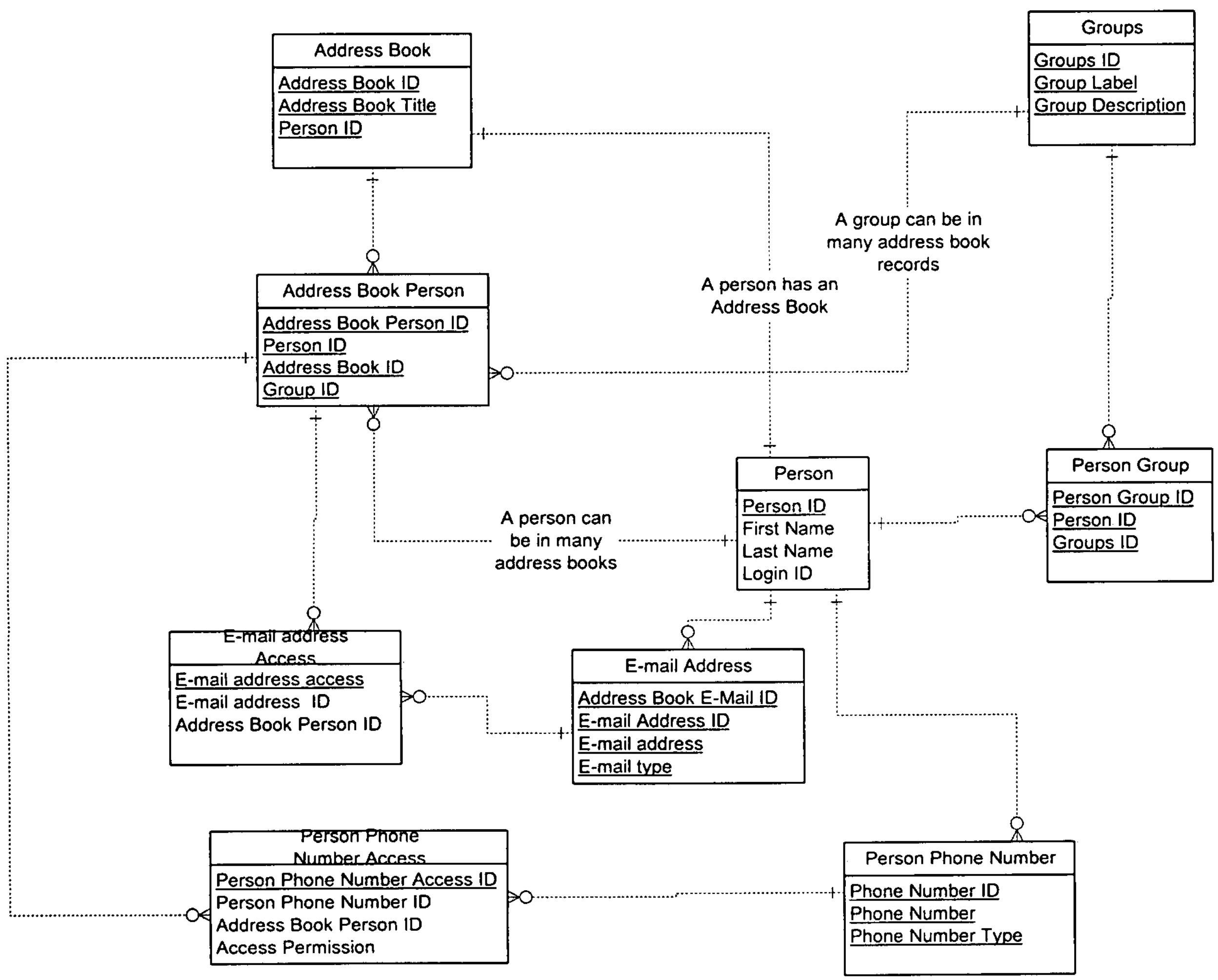
24.6. Discussion



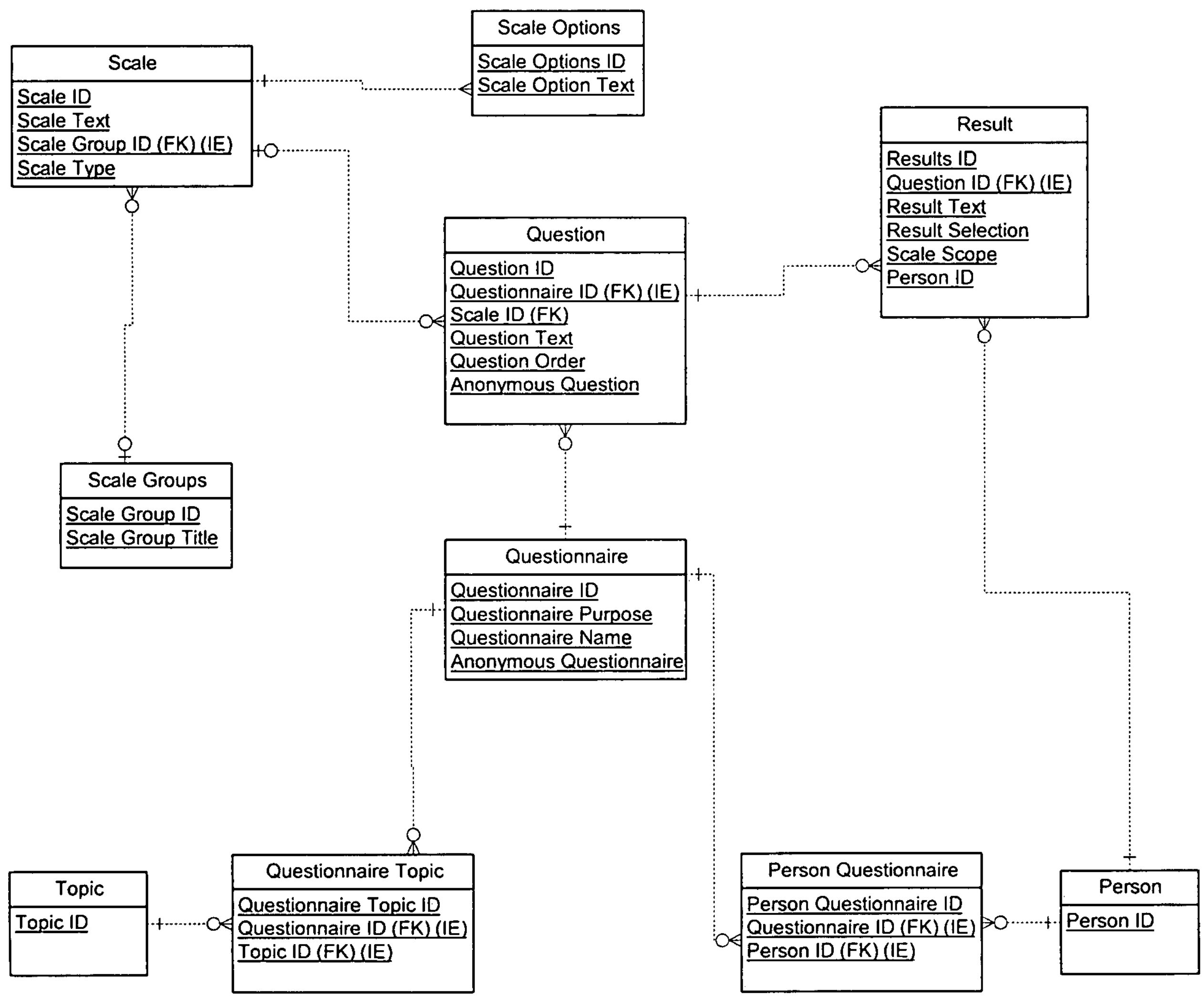
24.7. Task


Template ItemsTask
Template Item ID
Task Template ID
Task Title
Type of Task Item
Description of Task Item
Location of Task Item
Repeats Every
Repeating Start Date
Repeating End Date
Repeats How Often
Start Time
End Time
Task Template
Task Template ID
Task ID
Purpose
Title
Task Person
Person Task ID
Task ID (FK) (IE)
Person ID (FK) (IE)
Role ID
Status
Person
Person ID
Person Name
Roles
Roles ID
Role
Task
Schedule ID
Schedule Title
Type
Percent Complete
Priority
Start Date-Time
End Date-Time
Status
Date Created
Attachments
Attached Note ID
Notes
Location
Template Schedule ID
Category
Attached Note
Attached Note ID
Attached Note
Task Topic
Task Topic ID
Topic ID/1 (FK) (IE)
Task ID (FK) (IE)
Topic
Topic ID
Topic Name

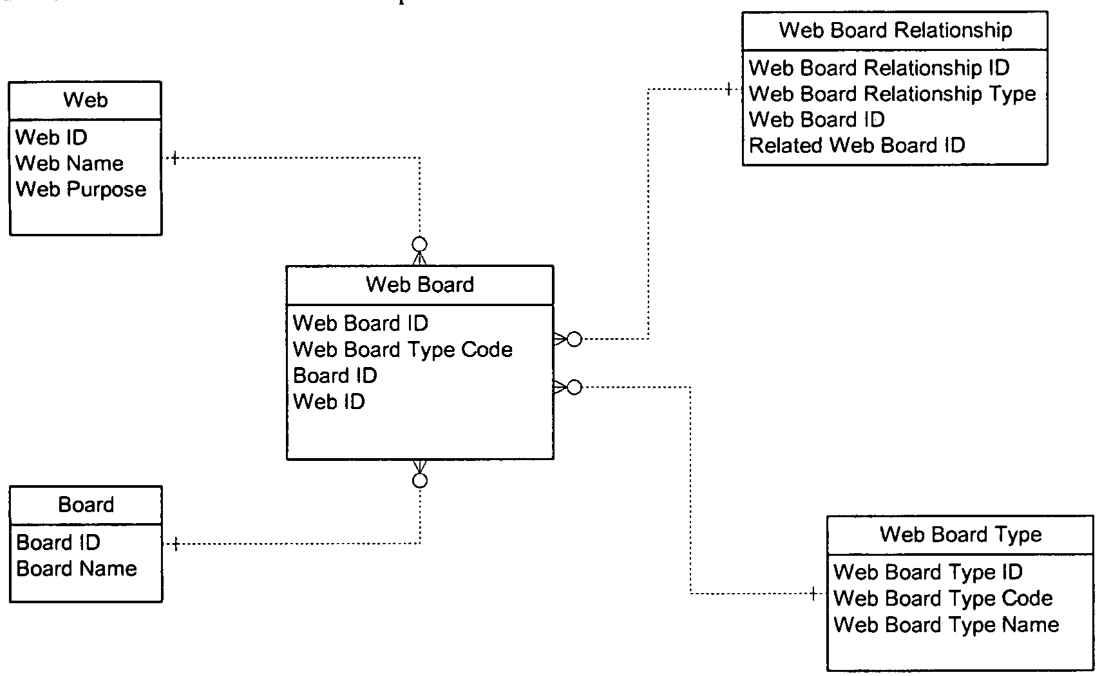
24.8. Address Book



24.9. Questionnaire



24.10. Web Board Relationship



25. Approach

25.1. Development tools

25.1.1. Java Version

JDK 1.15, JSDK

25.1.2. Java Shared Data Toolkit

The JSDT is a toolkit from Sun Microsystems that allows developers to code applications that share data between users on different clients without having to deal with the low level networking protocols normally associated with this type of activity. The JSDT uses a client server model and gives the developer access to Sessions, Channels, ByteArrays and Tokens. Through these four mechanisms, the developer can control a wide variety of activities including data sharing, synchronization of file and data transfers, individual client control of an application resource, and data broadcasting.

25.1.3. API(s)

JavaBeans, Java Database Connectivity (JDBC), Java Shared Data Toolkit (JSDT), Java Telephony Application Programming Interface (JTAPI), JavaMail Extension,

25.1.4. JavaMail Extension

The JavaMail Extension allows a developer to interact with mail systems. The JavaMail Extension handles SMTP, POP3, and IMAP. The JavaBeans Active Framework is required in addition to the JavaMail Extension, and an additional extension is required for POP3 support as well. All 3 components are available from **http://www.javasoft.com**.

25.1.5. JDBC

The JDBC, or Java Database Connectivity Kit, consists of two parts. One is the JDBC API, which is provided with later versions of the JDK. The other component is the driver component. These are available at **http://www.javasoft.com**.

25.1.6. Button Applets

Various button applets will be required for navigation and other purposes with the application. 1 Cool Button Tool will create these applets. The software is available at **http://www.buttontool.com**.

25.1.7. Supporting Products

25.1.8. **PointPlus Java Viewer** – The PointPlus Java Viewer displays Microsoft PowerPoint presentations. It is written in Java. This product comes in two parts. One is an applet that displays PointPlus Java presentation files (.jvs extension). The second portion is an MS Windows application that is referred to as the PointPlus Maker, which converts Microsoft PowerPoint files (.ppt extension) into PointPlus Java presentation files. Currently, PointPlus Maker requires user input to make the conversion.

25.1.9. The Engineering team will develop, with the viewer company, a solution so that LEADER Meeting™ end users will only need to upload an existing PowerPoint file. The

conversion will be done on the server side. The PointPlus Java Viewer is available at **http://www.net-scene.com/java-site/jshow/index.html**.

25.2. **File Upload Servlet** – LEADER Meeting™ file uploading has two parts. One is on the browser side, and the other is on the server side. On the browser side, any browser that properly implements RFC 1867 will provide File Upload capabilities. Netscape 3.0 or greater and Microsoft Explorer 3.0.2 implement RFC 1867 correctly. (Versions of MS Explorer before 4.0 require additional plug-in files from Microsoft to work correctly.)

26. Status

Standard LEADER Status reporting will be followed.

27. Configuration Management

Standard LEADER Configuration Management will be followed.

28. Quality Assurance

Standard LEADER Quality Assurance reporting will be followed.

29. Development Environment

29.1. Database Software

The system will be built with Oracle 8.0.

29.2. Development Software

Java Software will be developed using Java 2.0.

29.3. Platform

The development platform will be a Server located in the LEADER Offices in Columbus. It will house both the Web Server and the database server. It will support a Java compatible web server capable of running Java Beans (Java Servlets)

26. Production Requirements

26.1. Browser

LEADER software will require users to have Internet Explorer 3.0.2+ or Netscape Navigator 3.0+. Some select features may require 4.0 or greater versions in each respective browser. When a user lacks the correct version, help pages will be created to inform the user of where to download the newer components/software and an associated link.

26.2. The production platform

The platform will actually consist of multiple systems for scalability. There will be a single database machine with a cluster of web servers. All the platforms will run some flavor of UNIX (at this time not selected).

The production database will be Oracle.

26.3. Redundancy

There will be multiple production sites for the LEADER software. We will not be dependant upon any one particular site for all production needs. Each production site will have a completely operational system and will not be reliant on another site for any of it's processing or data.

The telecommunication capability will also be redundant so there is not a single point of failure in any of our production facilities.

26.4. Replication

The database will be replicated between the multiple production sites so that if one of the production systems were to go down, there would be another system immediately available to take it's place with all of the current data for both systems (less the limited amount lost in between replications).

Leaderboard Glossary of Terms

Term	Definition
Channel	A type of a Leaderboard. It generally would not have the full functionality of a Leaderboard but would be limited to news or other general information.
Chat	A tool for real time written communication. Users of a chat utility are presented with a common interface, which is updated each time a new entry is made to the conversation. Chats can take place between many different people in many different locations.
Collaboration	The act of working together as a team to accomplish some objective.
Compile	Displays unread or unacknowledged information on a screen for a user of the system. Either this could be done on an individual board, where the information displayed will only be from that board, or it will be on all boards a person has access to.
Component	A piece of information. A component could be an e-mail message, discussion thread (not just a single post on a discussion), a file, a meeting, or a fax.
Context	The circumstances surrounding a piece of information or content. A Leaderboard would provide context for a component because it should what the information is related to.
Context Diagram	A diagram that displays the web relationships around the board the person is working on.
Discussion	A tool for communicating in written form. A person posts an idea, thought or question onto a special place for discussions and other people can respond to that message or create a completely different post. The users of a discussion board do not all have to be using the system at the same time. A discussion is typically not happening then in real time but over a period of time.
Indexing	The process of gathering key words from content and saving it into a database.
Keyword Searching	When system will search through the keyword data table for matches to a user entered word or words.
Leaderboard	An arrangement of information content around a particular subject area or purpose. A Leaderboard can have only one member or a large number of members depending on the subject or purpose. Leaderboards will have a series of tools available for a person to create, read and update the content.
One Touch Tool Bar	The bar across the top part of the screen where the common set of tools are displayed for a Leaderboard.
Role	The function that a person is performing in an organization. A role can be assumed by another person in the organization if granted by the first person.
Shared Presentation	Tool for sharing visual information with other members in real time. This would typically be used during an online meeting so that an image or series of images could be displayed at the same time to the other participants in the meeting
Tools	An application or functionality that is available in the system. The tools will be listed on the One Touch tool bar.
Universal Inbox	Virtual storage location for new information in the system that is directed at a particular person. Usually, e-mail, voice mail, and faxes are found in a universal inbox.
Virtual Folder	A virtual collection of information grouped in some fashion by a user of the system. The Folder is the label given to the collection of information.
Web	A group of Leaderboards and their relationships to each other.
Web Processing	This refers to the process of either putting information on a group of Leaderboards, or retrieving information from a group of Leaderboards.
Web Navigating	A method of selecting a Leaderboard to work on. The navigating is a type of menuing tool that allows the users of the system to traverse the structure of a Web

	via a graphical interface.

EXHIBIT I

created on or before May 10, 2000

Leaderboard Tools Functionality Listing:

Tool	Functionality	Description if necessary
Calendar	Able to create recurring appointments	Just like recurring events only these will have specific times associated with them.
Calendar	Able to Create Events	An event is something that occurs on a particular day but is not associated with a specific time.
Calendar	Able to print to calendar in various formats	Monthly, Daily, weekly
Calendar	Able to select a day from a Small calendar to move to that day to display	
Calendar	Create Appointments	When creating an appointment the user will put a title on the event, select a category for the event, and select or input a contact person. They will also have the option of specifying a location, status, priority, duration, date, time, inputting a note, and attaching files.
Calendar	Create recurring events	Birthday's Anniversaries etc. Recurring events will also have the same functionality that individual events have.
Calendar	Events that don't have a specific time will display at the top of the day's events.	
Calendar	Move backward or forward between days in a calendar	Or weeks or months depending on the view
Calendar	Provide Daily view of appointments	
Calendar	Provide Monthly Calendar to Select Days from	
Calendar	Provide Monthly view of Appointments	
Calendar	Provide Weekly view of Appointments	
Calendar	Provide Yearly View of Appointments	
Calendar	Use a template for groups of appointments	
Calendar	User will be able to combine any of the calendars they have access to for a combined display.	
Calendar	User will be able to select a particular event or scheduled item to see details on that item.	
Calendar	User will be able to select their business hours so the display will start with the beginning hour.	
Calendar	Users will be able to search for a particular calendar item.	
Calendar	Users will be able to use templates for generic schedules	A template is a set of events grouped together that can be reused at a later time.
Calendar	When scheduling appointments system will check to make sure there aren't any conflicts for any of the participants.	
Compile	Person can acknowledge an item	Acknowledging an item removes it from the display list
Compile	Person can put reminders on items	Reminders create a task entry for an item and change the status of the original item.
Compile	Person can view all new information	

Contacts	A user can designate a particular email address as the default email address in the contact list for a particular person.	
Contacts	A user can designate a particular phone number as the default phone number in the contact list for a particular person.	
Contacts	Create a single person entry in contact List	
Contacts	Create groups of contacts in the contact list	
Contacts	Delete Entry from the contact list	
Contacts	Each Leaderboard will have it's own contact list	At a minimum, the contact list will be made up of the people who have access to the particular Leaderboard. It can also be added to as the members of the board see fit.
Contacts	Import contacts from Shared Lists	Shared lists could be the corporate phone directory, or another phone list that the person has access to.
Contacts	Modify Information on a particular contact	
Contacts	Personal or private contacts can be added to the corporate system	
Contacts	Select Groups of contacts	Phone calls, meetings, messaging
Discussion	An Idea Registry entry can be made from a Discussion Note.	
Discussion	A discussion note can be acknowledged	
Discussion	A remind me can be created from a Discussion	
Discussion	A user can acknowledge a chat	
Discussion	A user can anonymously view a chat	
Discussion	A user can create a remind me from a chat	
Discussion	A user can display a discussion thread	The thread display will show the name of the person who started the discussion, the number of notes in the thread, and when it was last updated.
Discussion	Chats will be saved as a type of discussion.	
Discussion	Discussion can be shared with other people	A shared discussion will show up on another person's office page
Discussion	Discussion notes can be added to a discussion thread	
Discussion	Discussion notes can be relied to	
Discussion	Discussion notes can be tracked for read/not read status	
Discussion	Discussion threads can be created	
Discussion	Discussion threads can be expanded or shrunk	
Discussion	Notes can be read	
Discussion	The chat display will show which chats are currently on-going	
Discussion	The list of chats will show a list of information about the chat	It will display the host, the name of the chat, the moderator, the date of the last post, the total number of posts, and the current status of the person using the system.
Discussion	The system will keep track of who has read which messages	
Discussion	Threads will graphically display the partent child relationships of notes	
Discussion	Users will be able to have online chats	

Files	Ability to create reminders associated with files	
Files	Acknowledgement of files	By touching a file, a person acknowledges it.
Files	Associate Files with other components	
Files	Automatic Indexing of files	
Files	Automatically Associate the person who uploads a file with the file	
Files	Download files from subject Areas	
Files	Files can be filed in any of the virtual folders for a Leaderboard.	
Files	Files can be tracked for read, acknowledged, or not read status.	
Files	Not allow overwriting of files	(no accidental deletions)
Files	Single point of storage	A file can be stored one time in a physical location and then references can be made to it from other places
Files	Upload files to a subject Area	
Files	Will have a description attached to them	
General Information	General Information will be updated by the host of the system or a designated user.	
General Information	The various types of general information will display on the left hand side of the display under the Leaderboard list.	
General Information	General Information can be of virtually any type for a board.	
General Information	General Information can be associated with any Leaderboard	
Ideas	Able to forward ideas to share them with others	
Ideas	Able to record ideas with a date time stamp	
Ideas	Ideas can be shared on a leaderboard	
Ideas	Submitter of an idea has the ability to delete a posted idea	
Meeting	A quick vote can be taken during a meeting	
Meeting	Assign Duration for Meetings	
Meeting	Assign Tasks from Meetings	
Meeting	Attach a reminder to a meeting	
Meeting	Attach Tasks to Meetings	
Meeting	Automatic links between files and meetings when used in a meeting	
Meeting	Automatically enter date and time	
Meeting	Create a recurring Meeting	
Meeting	Detach meeting from browser window.	
Meeting	Has a Projector for presentations	
Meeting	Have access to Phone calling application from the meeting	
Meeting	Have on-line meetings	
Meeting	Include voice and a shared interface with other members of the meeting	
Meeting	Invite people to a meeting	
Meeting	Meetings can be filed in any of the virtual folders for a Leaderboard.	
Meeting	Provide Monthly calendar to select Days from	
Meeting	Put a priority on a meeting	
Meeting	Security Options	

Meeting	Select any time frame for Meetings	
Meeting	Select Participants from shared address books	
Meeting	Select Tools to use in a meeting	
Meeting	Send a FYI note to another person in the meeting	
Meeting	Share documents with people while in a meeting	
Meeting	Shows when a meeting is going on	
Meeting	Take notes while in the meeting	
Meeting	View History of Meetings	
Messaging	Ability to Forward messages	
Messaging	Ability to Reply to messages	
Messaging	Address Book Maintenance	
Messaging	Automatic Indexing of received messages	
Messaging	Automatic Indexing of sent messages	
Messaging	Compose and send mail to other people	
Messaging	Display will show the type of message in the inbox	
Messaging	Faxes can be handled like e-mail	
Messaging	Messages can be filed in any of the virtual folders for a Leaderboard.	
Messaging	Read e-mail sent to you	
Messaging	Read Receipts	
Messaging	Virtual Folders	A virtual folder provides a way for a user of the system to customize the display of the messages. This would include sort parameters and filtering.
News	News can be associated with any Leaderboard	
News	News for a company will default at the top of the screen	
News	If a user chooses only unread news items will be displayed for that user.	
News	An organization can choose to provide news to their employees	
Notes	A list of notes will be displayed when this tool is selected	
Notes	A person will be able to edit notes on a board.	
Notes	It will be possible to associate a note with any other piece of content in the system	
Notes	Notes can be filed in any of the virtual folders for a Leaderboard.	
Notes	Notes can be removed from the display by deleting them.	There are two types of delete authority. Some people can remove information so it is not displayed on the screen, and some can actually delete the information from the system.
Notes	Notes can be accessed by clicking on the notes button on the toolbar, or by clicking on the notes image on another piece of content.	
Options	Each user will be able to select various system wide parameters	These include which leaderboard to display first, how the user wants the Leaderboards displayed, and others.
Options	The host of a Leaderboard will be able to designate default security options for users and	

	tools	
Options	The host of a Leaderboard will be able to designate who has access to a particular Leaderboard.	
Options	The host of a Leaderboard will be able to set the security access for each of the tools on a Leaderboard for each user of the Leaderboard	
Options	Users will be able to create and manage virtual folders for a Leaderboard. There will only be one set of virtual folders per Leaderboard.	
Phone	Notes on a phone call can be edited.	
Phone	The host can designate a new host to take their place while on the call.	
Phone	User will be able to add contacts from the calling setup screen.	
Phone	Adding a Reminder to Notes	
Phone	Call back a person or group of people previously called.	
Phone	Create Conference Call	Up to 10 concurrent people on the call
Phone	Detach the phone book to float over the page	
Phone	Phone calls can be filed in any of the virtual folders for a Leaderboard.	
Phone	Select People by Groups to call	Groups are created in the address book, or are system created groups from Leaderboards.
Phone	Select People Individually to call	Person called can also be added to the address book.
Phone	The host of the call will be able to add additional people to the conference call.	Interface during the call will allow the host to select.
Phone	The host of the call will be able to drop participants from the call and still continue with the call.	Interface during the call will allow the host to select.
Phone	User will be able to Digitally Sign Notes	
Phone	User will be able to enter a Purpose for the call	
Phone	User will be able to enter a Topic for the call	
Phone	User will be able to input notes with the phone call	
Phone	User will be able to Search for Users in the system to get phone numbers.	
Phone	User will be able to Select a Phone Service Provider	
Phone	User will be able to select Security Options	
Phone	View Information on Calls previously made	
Searching	HTML Pages are automatically indexed.	
Searching	It will be possible to search within the results of a search	
Searching	It will be possible to select an item that has been returned on a search	The item will be opened with whatever tool is appropriate.
Searching	User can search the internet for information and save it on a Leaderboard	
Searching	User can search the system for information	They will be provided with a list of information that matches the search criteria
Tasks	Able to relate files to tasks	

Tasks	Acknowledgment of tasks	By touching a task, a person acknowledges it.
Tasks	Assign Duration for Tasks	
Tasks	Assign Locations	
Tasks	Assign Priorities to Tasks	
Tasks	Assign Roles for Tasks	
Tasks	Assign Tasks	
Tasks	Create Recurring Tasks	
Tasks	Create Reminders for Tasks	
Tasks	Create Tasks	
Tasks	Date and time automatically entered	
Tasks	Provide Monthly calendar to select days from	
Tasks	Set Due dates	
Tasks	Start Date can be selected	
Tasks	Tasks can be acknowledged	
Tasks	Tasks can be designated completed from the list of tasks	
Tasks	Tasks can be sorted in a variety of ways.	They can be sorted by Priority, Item, location, or Due date.
Tasks	Tasks can be temporarily hidden	It is possible to hide the display of certain tasks so free up the screen from some of the clutter. The tasks will only be hidden for that session only.
Tasks	Tasks can be tracked for read, acknowledged, or not read status	
Tasks	Tasks will be displayed showing information on the task	The display will show the Name of the task, the priority, the location, the due date, and whether there is a note associated with it.
Tasks	Track Task progress	
Tasks	Track when a person acknowledges a task	For tasks that are assigned to other people
Tasks	Use a template for groups of tasks	
Tasks	Users will be able to use templates for generic tasks	A template is a set of tasks grouped together that can be reused at a later time.
Tasks	Virtual Folder	
Voting	A questionnaire can be set up from historical questions	
Voting	Results of questionnaires can be shared with others	
Voting	Scales can be added to the voting scales	
Voting	The voting system has predefined scales	
Voting	Users will be notified of pending votes	
Voting	Votes can be taken on a question	
Voting	Votes can be taken on a series of questions or questionnaire	
Voting	Voting can take place or a user selectable period of time	

EXHIBIT J

created on or before June 2, 2000

LEADER

TODAY'S TECHNOLOGY:
Groupware, decision support, EIS, OLAP, customized to vertical specialties: commerce, health care, petroleum, financial, insurance, etc, are technician dependent, difficult to change

JUNE 2, 2000

Conclusion - points of felt need

"Golden" Solution Thread

- Leadership is a **universal need**.
- Leadership is **lacking** everywhere.
- **Intuition** is a critical factor in leadership.
- **Technology has failed** to support leadership.
- Automation must **support**, not attempt to replace leadership
- A **new technology concept** is required.
- **Vision, purpose, talent** utilization are keys to leadership
- Social structure must generate the **intellectual capital**
- **Performance** must able to be gauged objectively

LEADER and **Leadership Software™**

universal structure that can be specialized to niche uses by the users themselves, changed "on the fly"

Insight Inside®

click here to continue >

EXHIBIT K

dated December 19, 20 and 21, 2000

From: <steve@computerwizards.com>
To: "Andrew Barnhart" <andrew@computerwizards.com>; "Lamb, Jeff" <jeffp@computerwizards.com>; "Bud Budrejko" <bud@computerwizards.com>; "Mark Astin" <mark@computerwizards.com>; "Dave Harden" <dave@computerwizards.com>; "Vonda Kay Barnhart" <vonda@computerwizards.com>; "Wendy Adams" <wendy@computerwizards.com>; "teresa" <teresa@computerwizards.com>
Sent: Tuesday, December 19, 2000 8:51 AM
Attach: ATT00003.htm
Subject: 12/19/2000 - Today in CWC (Monday - 12/18/2000)

Leader Product Development
Mark & Jeff completed refining the Skeleton application and will begin use of this with the creation of the TaskApplication today .... this is cool!

I was able to see some of the first real interfaces being created by our code when I stopped by Jeff's last night .... this is awesome .... as a non programmer I get lost in some of the discussions and it is wonderful to SEE something tangible, even if it is very preliminary .... you all are doing a great job!

Please keep the momentum going and communications open in all directions.

I decided not to try and have a group meeting yesterday, as we believe that everyone is engaged and focused on the right tasks. Please send up a flare and get in touch with Jeff or I if ever you find yourself 'out of the loop' on the priority tasks at hand, so we can get things corrected, etc.

Schedule
Jeff and Mark will begin applying the skeleton app to the remaining tools today.

Eric has made himself available today and tomorrow to focus on getting the 3 tools he is responsible for designed. .... thanks Eric, this is a big help!

Andrew will be back the 22nd (Friday)

One of the Sun servers was installed and put on the network yesterday (Bud supported remotely), the second will be completed this morning .... we hope ....unfortunately this one is the one for Objectstore, so it is still not loaded.

The PO was signed by Mike and will be faxed this morning (formal Objectstore and Toplink purchase)......... this will get us the copy of Toplink for Bill to begin playing with and the support site password for OS.

Non-Leader stuff
I believe that Bud has the verisign certificate in place and working for UVJVS.

From: "Steve Hanna" <steve@computerwizards.com>
To: "Mark Astin" <mark@computerwizards.com>; "Andrew Barnhart" <andrew@computerwizards.com>; "Bud Budrejko" <bud@computerwizards.com>; "Dave Harden" <dave@computerwizards.com>; "Jeff Lamb" <jeffp@computerwizards.com>; "Teresa Lamb" <teresa@computerwizards.com>; "Eric Rosenberg" <eric@computerwizards.com>; "Vonda Barnhart" <vonda@computerwizards.com>; "Wendy Adams" <wendy@computerwizards.com>
Sent: Wednesday, December 20, 2000 8:49 AM
Subject: 12/20/2000 - Today in CWC (Tuesday 12/19/2000)

*** PGP Signature Status: good
*** Signer: Steven E. Hanna <steve@computerwizards.com> (Invalid)
*** Signed: 12/20/2000 5:49:08 AM
*** Verified: 12/20/2000 9:03:10 AM
*** BEGIN PGP DECRYPTED/VERIFIED MESSAGE ***

Leader Product Development
Progress continues on a few fronts:
Jeff & Mark are moving out using the Skeleton Application to create the the other Tools/apps; a first cut at the Task tool was completed.
I do not know the other progress from Jeff/Mark.
Eric spent the day working the design of the phone tool (I believe).

I sense some frustration from several people in the team for slightly differing reasons.
I encourage each of you to stop, take a short break, "a breath of fresh air" to clear your minds and relax, before you jump in and hit it hard
today. I applaud your efforts and appreciate all of the time that each and every one of you are putting into the project, and in fact ALL of this
effort is necessary, but we must also consider the breadth of the project and pace ourselves for the longer haul.

The second Sun server was successfully installed and connected to the network. Bud and Dave have spent time with them configuring and patching Solaris, etc.
Dave has successfully loaded Objectstore, OSJI, and JMTL on hermes (the Sun 220 server).
ObjectStore is up and running!

Design Central Status
I attended a meeting with Betsy at design central yesterday morning and here is the current status.
-Betsy has signed off on and we have received copies of:
Linking content
Selecting attachments
The Agenda area (both the java version and pure html version)
-Betsy signed off on but has not received copies of the following:

ICONS
Task_create_general (one more tweak to this one coming.....not signed off)
Task_create_recurring_daily
Task_create_recurring_weekly
Task_create_recurring_monthly
Task_create_recurring_yearly
Task_create_link_content
Task_create_assign
Task_create_relate tasks

Phone_call set up _general (one more tweak to this one coming.....not signed off)
Phone_call set up _participants
Phone_call set up _provider
Phone_call set up _link content
Phone_list_My pending
Phone_call set up_call now_call desktop_participants
Phone_call set up_call now_call desktop_minutes (one more tweak to this one)
Phone_call set up_call now_call desktop_leader meter

We expect the Projector to be signed off Friday and 1 or 2 of the following: Calendar, Notes, Contacts, Compile

Schedule
Eric is working from home today on the phone design (and potentially the other two tools on his list)
Jeff & Mark are working the design for the remaining tools.

We need to coordinate and determine who will do the Oracle install on the 450 server (Bud lets talk today with Brad, etc.)

There is an investor (potential investor) meeting in Dayton today, I will be away all morning through the lunch time frame.

*** END PGP DECRYPTED/VERIFIED MESSAGE ***

From: "Steve Hanna" <steve@computerwizards.com>
To: "Mark Astin" <mark@computerwizards.com>; "Andrew Barnhart" <andrew@computerwizards.com>; "Bud Budrejko" <bud@computerwizards.com>; "Dave Harden" <dave@computerwizards.com>; "Jeff Lamb" <jeffp@computerwizards.com>; "Teresa Lamb" <teresa@computerwizards.com>; "Eric Rosenberg" <eric@computerwizards.com>; "Vonda Barnhart" <vonda@computerwizards.com>; "Wendy Adams" <wendy@computerwizards.com>
Sent: Thursday, December 21, 2000 8:37 AM
Subject: 12/21/2000 - Today in CWC (Wednesday 12/20/2000)

*** PGP Signature Status: good
*** Signer: Steven E. Hanna <steve@computerwizards.com> (Invalid)
*** Signed: 12/21/2000 5:37:34 AM
*** Verified: 12/21/2000 12:31:59 PM
*** BEGIN PGP DECRYPTED/VERIFIED MESSAGE ***

Leader Product Development
The Skeleton application was refined more during the design of the TaskApplication.

The skeleton was copied to give us the framework for the discuss, idea, vote, note, calendar, message, user, board, and meet tools. Everything seems to compile and everything should work from the interface (meaning you should be able to switch back and forth between
the tools and if data were actually present it would work).

The Task and Calendar applications have been designed and are ready to be fleshed out with code. [Wendy & Dave please follow up with this as time permits]

Eric is working the Phone tool.

Schedule

Quick assessment/evaluation of our code with the real Objectstore DB 21 or 22 Dec (Jeff ?)
Work to tailor each of the remaining tools, adding unique functionality to their skeletal form 21-23 Dec (Jeff, Mark, Eric)
Get final verification of the XML/XSL approach: 22-23 Dec (Jeff, Andrew, Wendy)
Develop unique Meet tool interfaces 24-31 Dec (Andrew)
Refine XSL and transforms 24-31 Dec (Andrew)
Code Java part of the system for all tools 24-31 Dec (Jeff, Wendy, Dave)

***the above schedule is very 'drafty', but as you can see it is very aggressive, no matter how you look at it. I ask each of you to jump

in
wherever you can. I have attached the schedule of everyone's planned holiday time for your reference. Please send feedback if I have missed something.

Other
I participated in a presentation to potential investors in the Dayton area yesterday; it was a good meeting, we will know if any $$ come out of
it in a few days!

*** END PGP DECRYPTED/VERIFIED MESSAGE ***

<u>EXHIBIT L</u>

created on or before December 18, 2000

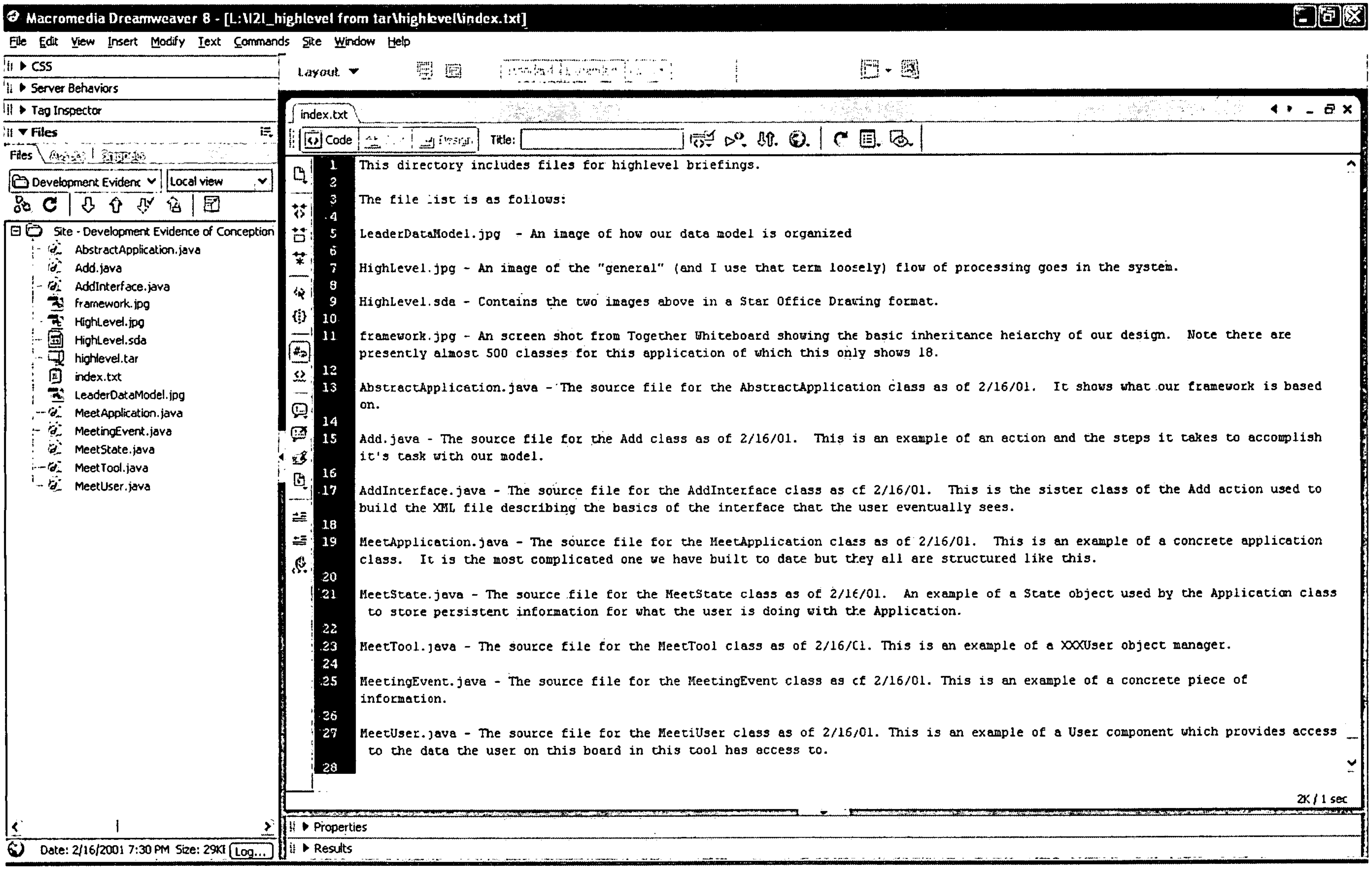
PROPRIETARY & CONFIDENTIAL

Leader Development Source Tree

File: index.txt

PDF embedded File: highlevel.tar

First created 18-Dec-2000 by Jeff R. Lamb and the Leader Development Team based upon LEADER Specification 2.1




```
This directory includes files for highlevel briefings.

The file list is as follows:

LeaderDataModel.jpg  - An image of how our data model is organized

HighLevel.jpg - An image of the "general" (and I use that term loosely) flow of processing goes in the system.

HighLevel.sda - Contains the two images above in a Star Office Drawing format.

framework.jpg - An screen shot from Together Whiteboard showing the basic inheritance heiarchy of our design.  Note there are
presently almost 500 classes for this application of which this only shows 18.

AbstractApplication.java - The source file for the AbstractApplication class as of 2/16/01.  It shows what our framework is based
on.

Add.java - The source file for the Add class as of 2/16/01.  This is an example of an action and the steps it takes to accomplish
it's task with our model.

AddInterface.java - The source file for the AddInterface class as cf 2/16/01.  This is the sister class of the Add action used to
build the XML file describing the basics of the interface that the user eventually sees.

MeetApplication.java - The source file for the MeetApplication class as of 2/16/01.  This is an example of a concrete application
class.  It is the most complicated one we have built to date but they all are structured like this.

MeetState.java - The source file for the MeetState class as of 2/16/01.  An example of a State object used by the Application class
 to store persistent information for what the user is doing with the Application.

MeetTool.java - The source file for the MeetTool class as of 2/16/01. This is an example of a XXXUser object manager.

MeetingEvent.java - The source file for the MeetingEvent class as cf 2/16/01. This is an example of a concrete piece of
information.

MeetUser.java - The source file for the MeetiUser class as of 2/16/01. This is an example of a User component which provides access
 to the data the user on this board in this tool has access to.
```

EXHIBIT M

created on or before February 14, 2001

Version Listing Matrix

Functions	Beta	V 1	V 1.5	V 2	Future
Acknowledge Content	X	X			
Agenda	X	X			
Board Support	X	X			
Calendar	X	X			
* Channels	X	X			
Chat/Whisper	X	X			
Compile List	X	X			
Compile List Displaying different tools	X	X			
Contact List	X	X			
Creating Leaderboards	X	X			
Department News	X	X			
Discussions	X	X			
* E-mail	X	X			
FAX Inbound	X	X			
FAX Outbound	X	X			
FAX Tiff to Text Conversion	X	X			
* File format conversion GPL	X	X			
File Versioning	X	X			
Help Screens	X	X			
Idea Registry	X	X			
Inbound Conference Calling (Adding to an existing call)	X	X			
* Installation Scripts	X	X			
Instant Messages (IM's)	X	X			
Links	X	X			
* Messages	X	X			
Muting	X	X			
News	X	X			
Notes	X	X			
On line meetings	X	X			
Outbound Conference Calling	X	X			
Phone Tool	X	X			
Projector	X	X			
Reminders	X	X			
Search	X	X			
Setup and Configuration	X	X			
Shared Files	X	X			
* Spell checking GPL	X	X			
Tasks	X	X			
Time Stamping	X	X			
* User's Manual	X	X			
Votes	X	X			
* Web Processing	X	X			
Webs	X	X			
Voice Mail		Limited		X	
Calendar Templates		X			
Archiving data			X		
Authenticating Users in Central Leaderboard and accessing remote systems			X		
File Merging/Locking			X		
Printing Interface			X		
Summary Report			X		

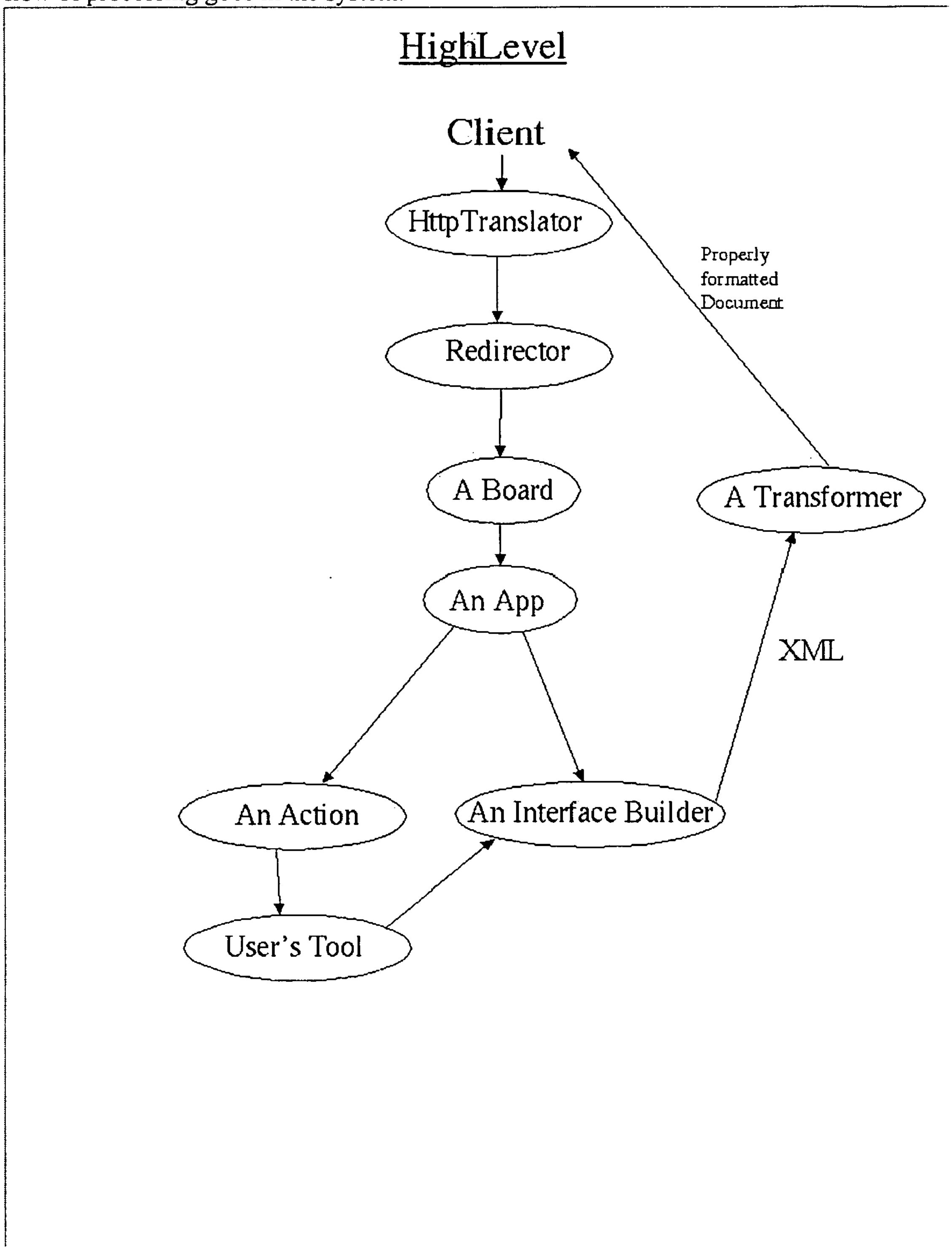
Version Listing Matrix

Task Relationships			X		
Time Limitation on Tasks			X		
Anonymous participants (Meeting)				X	
Automatic Phone number based on location of user				X	
Automatic responses to messages				X	
Call Routing				X	
Central Idea Registry				X	
Context Sensitive Help				X	
Data analysis tools				X	
Dialin access to Universal Inbox				X	
Gannt Charts				X	
Geographical Location Feature (for Tasks)				X	
Hub Spoke Meeting Model				X	
Leaderboard Images				X	
Palm Interface				X	
Reports				X	
Roles for People				X	
Screen Based Options				X	
Sound				X	
Streaming Media				X	
Text to Voice Interface				X	
Thesaurus				X	
Versioning for other tools				X	
VPN connectivity into Leaderboard				X	
Additional Folders for other tools					X
Briefcase					X
Leader Drive					X
Permissions by content					X
Previewer (Files)					X
Recording Conference Calls					X
Voice to Text Conversion					X

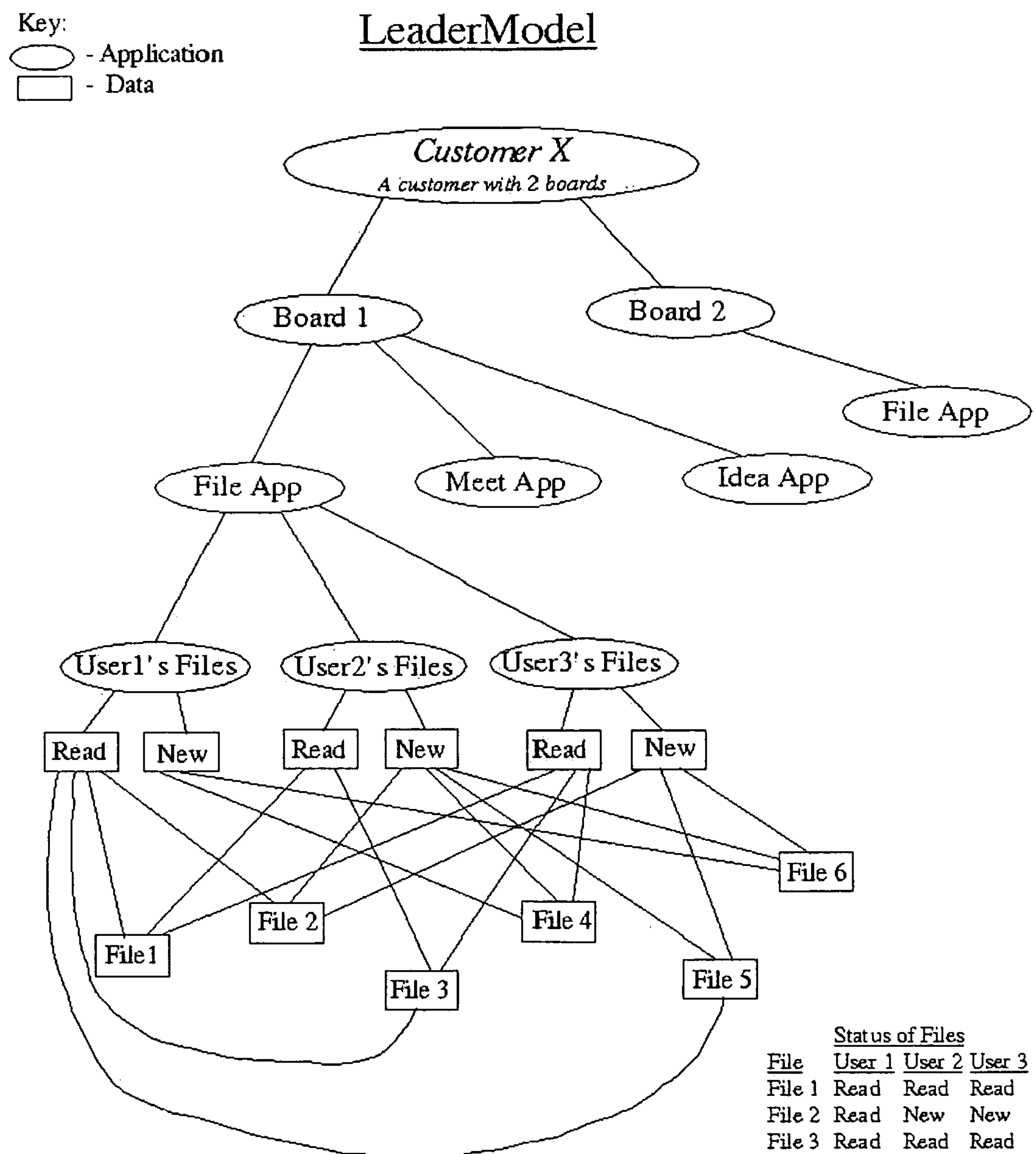
EXHIBIT N

as they existed on or before February 20, 2001

HighLevel.jpg – 20-Feb-2001: An image of the "general" (and I use that term loosely) flow of processing goes in the system.



LeaderDataModel.jpg – 20-Feb-2001: An image of how our data model is organized



Status of Files

File	User 1	User 2	User 3
File 1	Read	Read	Read
File 2	Read	New	New
File 3	Read	Read	Read
File 4	New	New	Read
File 5	Read	New	New
File 6	New	New	New

Framework.jpg – 20-Feb-2001: A screen shot from Together Whiteboard showing the basic inheritance heiarchy of our design. Note there are presently almost 500 classes for this application of which this only shows 18.

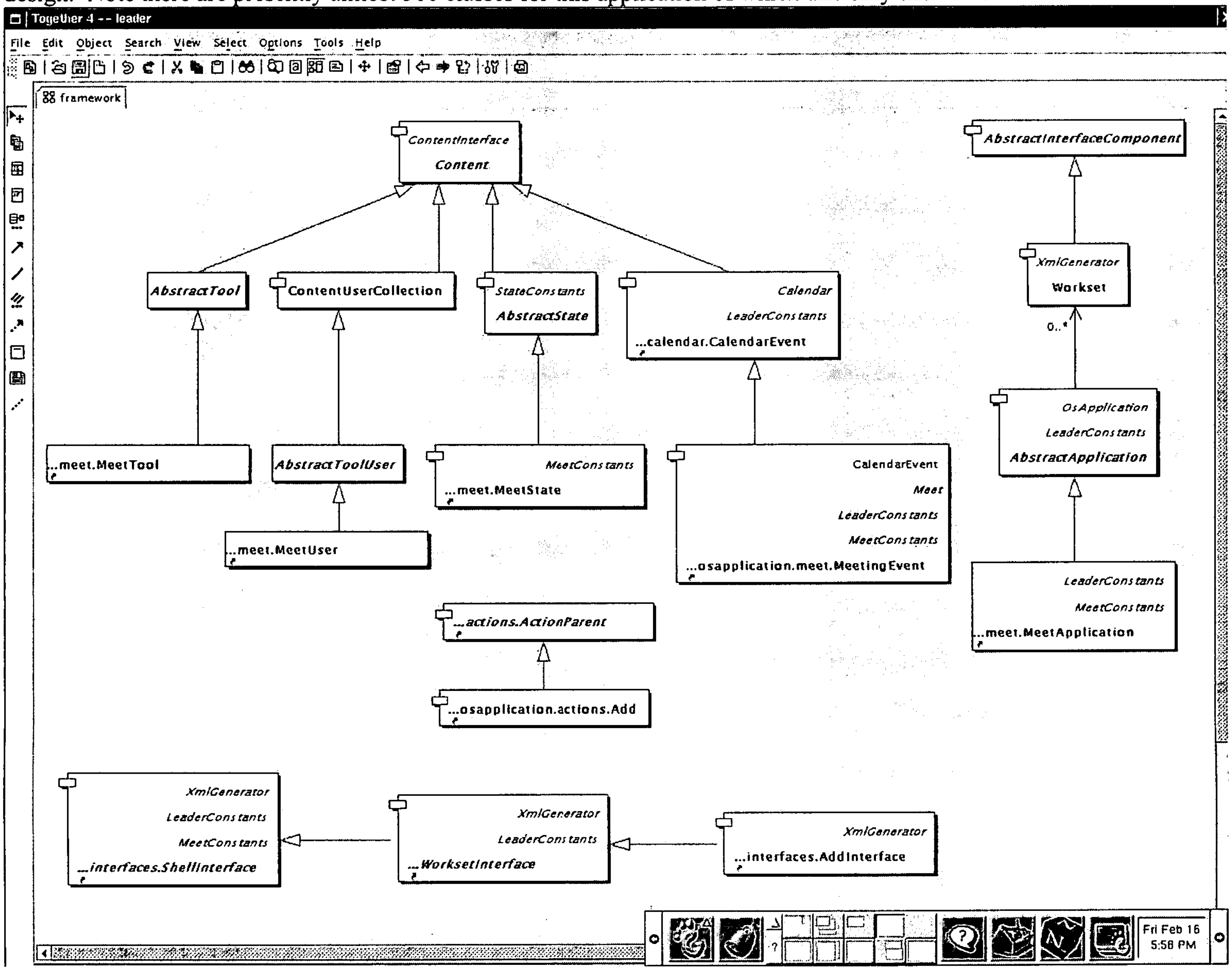


EXHIBIT O

created on or before November 6, 2001

General Discusion

In looking at the versioning stuff this weekend I cme up with some questions that I need answered to help bound the problem. Please provide your thoughts on each of these:

- Does ALL content support versioning (including AbstractState, Board,WebSlice, Preference, ContentUserCollection, UniqueNumberGenerator, Web,WebRelationship, WebSlice?
  - (BFOOTE) - Why is AbstractState content? I would say yes to all the Web stuff. I'm not familiar with ContentUserCollection and UniqueNumberGenerator.
  - (ERIC) - I would think so, at least in a dumb manner. Maybe we should reevaluate what should be content and what is meerly a persistent object?
  - (MARK) - Let me add some more clarification to question one.

    First there are other objects (I forgot about that are also content) Person, User, SignUp, etc.

    Question 1 is an ALL or nothing question. If we feel that there is some content that shouldn't be versioned (I feel that way right now) then we have to look at two types of content in our system, that which is versioned and that which is not. I don't think this is a trivial thing to do. This goes to Eric's comment about that question.

    Either way this is sliced there are issues:

    If not ALL content is going to support versioning then the Content inheritence structure will need to be refactored. If ALL content will support versioning then objects like User, Board, and State are problem areas since our current design doesn't expect them to change.

Boards
Customers
Users
Concrete People
Sales People
Meeting
PhoneCall

  - (CPULLINS) - I agree with Eric on this. Some content should support versioning, some shouldn't. I think versioning should be implemented in a way that will allow us to add or remove support for it from content at a later date.
  - (JEFF) - They all support it, but I don't think everything will actually have versions hanging out there.
- Do we expect versioning to track the author who made the change to each version?
  - (BFOOTE) - I think yes.
  - (ERIC) - I vote yes.
  - (CPULLINS) - Yes.
  - (JEFF) - Yes, unless you tell me that is a bad idea.
- Does versioning need to allow for a set of comments to be added when a new version of a piece of content is created?
  - (BFOOTE) - I don't think so.
  - (ERIC) - I think it should, but the default implementation (which should be transparent to the user) would have to auto generate this information or something.

Object is versioned not each version itself.

  - (CPULLINS) - When I was doing my screenshots for Files, I was anticipating that comments would actually be Notes linked to a specific version. This would allow a Note to be edited and linkable to perhaps other stuff. As for comments, no matter how they are implemented, some content should support version comments, others shouldn't. Whether comments are supported by default when versioning is add to content or if comments support is an add-on after versioning is up to you. I personally just think the comment text ultimately needs to go to a Note.
  - (JEFF) - Allow for yes, but not require

- Can a piece of content be edited by two persons at the same time?
  - (BFOOTE) - Probably, but some notification needs to happen when this is the case I think. Maybe Users should be notified if they try to Update their edited version to the current version and someone else did it from underneath them. I think this may be the step that we take on the road to doing some kind of merging for them.
  - (ERIC) - I think the solution we proposed for this in the past is that if you try to create a new version, and there has been another new version committed between when you started your edit and when you finished that you would get an error. At least I think this is what we said we were going to do for files.
  - (CPULLINS) - Yes. Who ever attempts the commit last is required to workout the conflict. This does throw a complication in content in how the user is notified of the conflict and how they will be able to resolve it for non-Files content.
  - (JEFF) - I say yes, but I think it merits further discussion.
  - (JEFF) - I just read everyone else's inputs as well (I wrote mine after reading the initial email). I heard mostly agreement. The big one I think is editing one piece of content by two people at the same time. I *think* we can make that a task that happens later. Versioning as I understand it should support locking, merging, optimistic locking, free-for-all etc and we will just get one of them enforced. In any case I don't think versioning itself should prevent editing by two people at the same time.
- Do we need major and minor version numbers or is it sufficient to just have a sequential ordering of version numbers such as 1, 2, 3, . . .?
  - (BFOOTE) - I don't have an opinion on this.
  - (ERIC) - I don't really care, but that begs the question, what would be the mechanisim for incrementing a minor vs a major version number? Do we need to be able to branch cotnent.
  - (CPULLINS) - As I recall, Jeff had said with Files, that a single digit should be used. It simplifies the code.
  - (JEFF) - sequential numbering
- (ERIC/BFOOTE) - Betsy and I were talking about the versioning thing some more and some things came up that I figured should be raised. If this versioning is going to be the default behavior for all content, then I think we may have some problems with things that are content that expect certain things to be unique unto themselves.

  For instance, sales people have a leader phone login name associated with them. On login the map of sales people is checked to see if there is one that corresponds to the user that is logging in. If we were storing versions of the sales people then there is no longer a one to one relationship between login name and sales entiry. This makes back office stuff much more difficult as well, since you now need to know the sales volume for all versions of all customers belonging to all versions of this sales person.

  I don't really know, but I assume that rating calls and billing will be bad. Like when trying to determine what to rate a call at you have to consider the call all the calls made by all versions of the customer.

Solution 1

When editing an object (obj1) to clone the persisted one we'll call the cloned object obj2, then make changes to obj2. When it comes time to update the object (I.e. the user has clicked the update button) we switch the object ids of Obj1 and obj2. This way the id of the current version of the object never changes and we don't have to backtrack object references

Tim did test to see if this could be done via VBSF and initial testing showed it could be done.

Pros

Cons

Discussion/Concerns from over-arching group

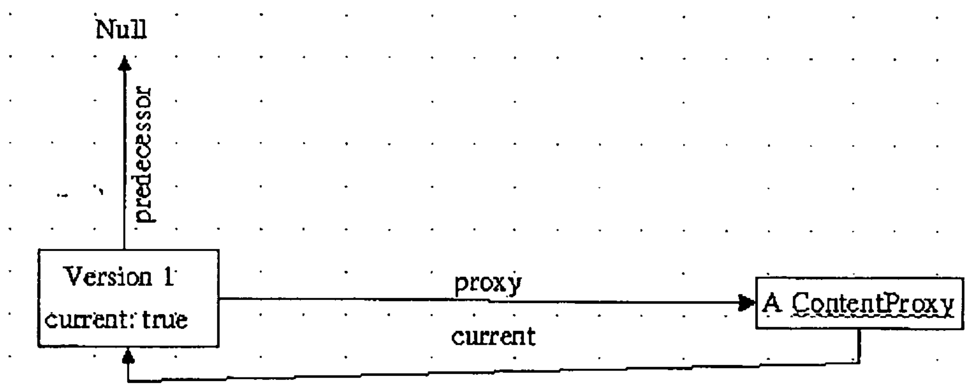
Solution 2 ← We can deal with it.

For this solution I've left out annoying details and tried to concentrate just on the things needed to explain the solution.

- We add several fields to Content. (proxyReference, current, predecessor)
- We create a ContentProxy (for lack of a better term) object. This object always has a reference to the current version of a piece of content. It is stored in it's own content table.

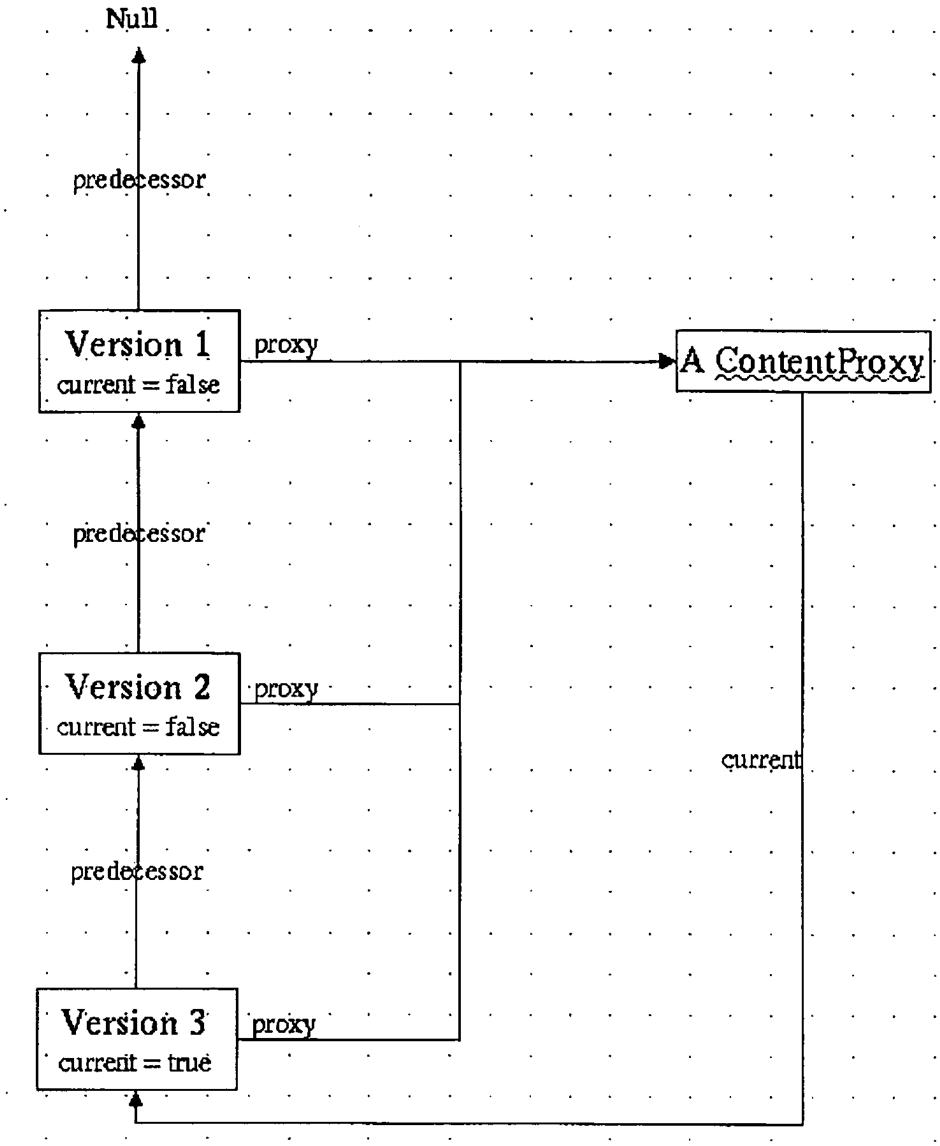
So here is the example:

1.) We create a new piece of content. The object instance model looks like this:



Notice that two objects have been created, the piece of content and a ContentProxy object.

2.) Now we create two new versions in succession. The object instance model now looks like this.



Notice that new versions of the content were created but new ContentProxy objects were not created. Basically the ContentProxy Object can be viewed as a singleton in relation to these pieces of Content.

The idea here is that when a new version is created the previous version's current flag is set to false and the ContentProxy object's current attribute is updated to the current one. Now, lets say a person wants to edit a piece of content. What happens is a new version is created, but it's current flag is set to false, however, it still has a reference to the ContentProxy and to it's predecessor. Now, if someone else creates a new version before this one is committed to the database then when the update action checks it's predecessor's flag, it finds that the predecessor is no longer the current object and we know there has been a previous version committed. Since the content we are working on has a reference to the Proxy object, which does have access to the current object, then we can take measures to deconflict the conflict if need be, such as doing a merge.

Pros

- Because of the constraints in the various tables we end up continuing to store the ids of existing content as they exist today so existing data would be ok (of course only after a alter script was run. ;-))
- For content that doesn't need versioning we can override the methods required to get the proxy object and the current flag to return null and true respectively.
- If we decide that a piece of content should be versioned that isn't, its just a matter of implementing the empty methods.

Cons

- This approach is somewhat more awkward (or at least more difficult to understand) than solutions 1 and 3
- Looking towards the future, we still have the issue of abandoning edit of content that doesn't support versioning. But it must be noted that only content that doesn't support versioning that must support abandoning edit and has to be collected on a multipart form would be affected.
- Fixing stale references. An example of this is when displaying lists. If for example a User has a Content object in their ActiveContent collection which has been superceeded by a newer version, the List action must be smart enough to update the User's stale content reference with the most current one.

Discussion/Concerns from over-arching group

- (BFOOTE) - For a name, how about VersionManager or something like that... unless you plan to use it for more than Version management.
- (JEFF) - Mark, I'd like you to consider a piece of content that has other objects as instance variables. How does this work with versioning? A good example is a phone call that has people with attributes (which has a person which has an address book entry which has a phone number etc (or something like that anyway)).

  Otherwise everything looks very good to me. . .I like the approach 3 better, but I don't think I like it enough to push for it.

  (MARK) - I think the answer to this is first which objects are versioned?

  I would say the phone call is, and the people with attributes, the person, the address book entry, and the phone number aren't. To make this exercise more fruitful lets say the phone call has an agenda item that is versioned.

  My answer is that for all content, when a object retrieves it, the object doing the retrieving HAS to check to see if the object it received is current, if not then it has to go to the ContentProxy or whatever we are calling it for the current version. So in this case IF all those objects need to be retrieved the same process would be accomplished for each. However, lets say when the agenda is retrieved it is found to not be current, and in that case extra processing would have to occur to fix the stale link.

  The above works for reading the object, now lets consider editing.

  If we are editing the phone call we would create a new phone call that is not the current version but is a copy of the current version. Those things that are not versioned would be ok, except for

people with attributes. I could see a case where you change the attributes on a person while editing a phone call but then you abandon the call. Having said that, this brings up an interesting point in that even though on the surface an object doesn't appear to need versioning it may require versioning in order to make abandon edit work. This seems like a bad but necessary evil.

At any rate, given this solution, those items that are owned content of the phone call will have to go through the process of fixing the ContentProxy if the phone call gets updated, whether they actually changed or not. I would imagine all content whether it is really versioned or not would go through the same process when it is updated.

Also the question about instance variables is an interesting point. I'll discuss that with Wendy and Tim tomorrow. My first guess would be the getter/setter for that variable has to be smart about fixing stale references and all access to the instance variables, whether they be private or not, would have to go through the getter/setter method. This seems dogmatic but again it may be a necessary evil. This issue gives more credability to the alternative approach since the Proxy object would by default return the current version. I'm not sure, I'll have to think about this a bit.

- (JEFF) - Why can't you version/clone/whatever people with attributes (probably not version the people with attributes, but make copies of the objects)? Each content would need to know how "deep" to go, but I think it would work. . . People with attributes is a "part" of the call while the person objects they point to are "referenced" by the call.
- (CPULLINS) - A quick thought I had on this is to enforce a process of working with versioned subcontent.

  Content.java would have:
  - a HashMap that would store the "instance variable" name as the key and the ContentProxy for that subcontent as the value. This would enable the content to always get the current version of the subcontent. The map could also store actual ContentInterfaces if the content wants to point at a specific version. The map could, alternatively, be an array that holds the proxies and/or subcontent ids indexed by static final integers defined in the superclass content thereby removing the overhead of the HashMap. There would just need to be an initializing method in Content.java that would set up the array.
  - protected final methods that allow superclasses to store and manipulate versioned subcontent without really having to worry about how it is done. These methods would eventually become debugged and fairly well trusted thus minimizing the chance for a superclass not handling this right.
  - void initializeSubContentStore(int variableCount) - Instead of a HashMap, Content uses an array. This builds that array. If the array is used the 'String variableName' arguments below would become 'int variableIndex'.
  - void storeSubContent(String variableName, ContentInterface content) - Assign some versioned content to variableName. If content is already there, I would think an exception should be thrown since this is a programming error; replaceSubContent() or supercedeSubContent() should be used instead.
  - ContentInterface getSubContent(String variableName) - Retrieval of the subcontent. From the content, the proxy could always be used to do more specific version stuff if the superclass content needs to.
  - ContentInterface removeSubContent(String variableName) - Basically nulls the variableName, and returns the removed content.
  - ContentInterface replaceSubContent(String variableName, ContentInterface newContent) - Effectively a removeSubContent() followed by a storeSubContent. No versioning code would be used here.

- void supercedeSubContent(String variableName, ContentInterface newerContent) - The subcontent itself may actually manage the versioning, but this could be used to address versioning concerns that replaceSubContent() doesn't.

Some afterthoughts:

Whether the HashMap or an array is used. It would probably be advantageous to use an inner class that stores the Content/ContentProxy id as a Long and the Class instance of the superclass Content or the ContentProxy pointed at by the object.

- (ERIC) - I don't have much of an opinion on which of your 2 proposals is better. I do think that the current constraints on the tables should not be a consideration in which approach to go with. If the constraints are wrong then we should change/remove them.
- (MARK) - My understanding of the constraints are they are non-negotiable.
- (ERIC) - I'm curious as to why we need a ContentProxy class at all. Why can't content just have a reference to its previous and possibly its next version? It wouldn't even need a full blown reference, just the id would suffice. I guess it gives you an easy way to get to the current version of a piece of content with out having to hunt. Where are we storing meta data about the version in these approaches? Stuff like who the author was of the version, date of the change, etc.
- (MARK) - The reason is say you have 50 versions of a piece of content, you hold a reference/id of the first version but the current version is number 50. You now have 50 fetches to accomplish before you have the current version. The Proxy or maybe VersionManager as Betsy had suggested can get to the current version in no more than 3 reads. Again this turns into a relational database thing..
- (ERIC) - Where are we storing meta data about the version in these approaches? Stuff like who the author was of the version, date of the change, etc.
- (MARK) - I left that out for clarity in the explanation, but some meta data would exist with each content, such as author, version number, etc. There may also be some common meta-data that could reside with the proxy, but I can't think of anything right now.
- (ERIC) - We might need to thing about this. I think it should go in the proxy. We'll have to think about what it means to be an author. Is the author the last person who changed it? Is it the person who first created it? Is it the person who has submitted the most changes (ridiculous)? Or is it the list of all people who created it?
- (ERIC) - I'm sorry if my random thoughts don't make any sense. It seems like a pretty good approach. Risky areas I see are just the amount of work this change will take since we need to change basically everything that operates on content to work with these proxy objects. We also need to make sure that we are reading the Content and Content Proxy objects from the DB every time. The whole thing would fall apart if it told me I had the current version because the content proxy and content object i'm looking at is stale.
- (MARK) - There definately is a concurancy problem that needs to be dealt with. No one on the team thinks this is a trivial solution. Finally, I agree as you allude to there is also an issue of versioning "leaking" into content objects, actions, and even interface builders. That is one benefit of the alternative approach (I think).
- (ERIC) - Is the new version created when you click edit or when you click update? What happens if while I'm editing a new version is created by someone else? If I click between tabs, does my edit screen update to show the latest version + my changes?
- (MARK) - When you click edit
- (ERIC) - I think it should be when you click update. Otherwise, people can cause a conflict just by looking at the content. I'm in the middle of editing the thing. You click on the content in the list. You essentially just clicked the edit screen. You read the fields, change nothing and leave. I don't think you should have created a version. Also, if the version is created when edit is clicked then

what happens if the edit is abandoned is the version deleted?

I think these problems would be avoided if the version wasn't created until create or update was clicked. Of course, that begs the question of what are you creating or editing if you don't create the content until you are done creating or editing it. I think Mark's abandon edit form solution would solve this problem nicely. You work on populating the form until create or update is clicked. Then you create the new piece of content and set all the versioning stuff.

- (MARK) -The catch is that when you click edit a new version is created BUT it isn't marked as the current piece of content until it is updated. We discussed this on Friday and the answer was let the user clean these extra things up. How was not discussed.
- (MARK) - No, I would think it only shows your changes. We talked about this a bit and my idea is we create yet another method that attempts to resolve conflicts between two pieces of the same type of content. If it can't be resolved, the first one to get there wins the other gets an exception, and possibly lose their edits or something else smarter happens.
- (BFOOTE) - I would think that the version would be saved when the conflict can't be resolved and the user could manage the conflicts themselves.
- (ERIC) - I think versioning is going to cause the DB to explode in size. Especially, if I am creating a new piece of content every time I click to view a piece of content. We already have that problem with create. We are going to get to the point where the number of pieces of content in the system equals the number of requests the system has processed.
- (BFOOTE) - The solution to this problem was to make the thing that happens when you click on the hyperlink of content be a read only view and there is NOT a new version created at that point. In that read only view there is going to be a way (button or something) for the user to say, I now want to edit this thing which is when the new version is going to be created.

This was an important part of the solution that I hope has not been overlooked.

Solution 3

There was another approach discussed which from a purely object oriented point of view is clearer (At least in my mind) but falters when we start to look at how our databases are constructed. Here is this approach for completness.

The third approach is to have all references to content really be references to a ContentProxy and have that resolve the current piece of content. A real piece of content would never know who it's predecessor was or if it was current. However, this is not as easily done due to constraints on the tables.

For example a record that has a reference to a Person expects the id that is stored in the table to really be a id of a person object. This is a constraint already enforced in the tables. By storing the contentproxy id instead the table constraint would be broken because the contentproxy would not be of the correct type. Another issue is that this approach always requires two reads of the database. One to get the proxy and the other to get the current object. The first approach may shortchange the two database reads in that if the object is current then you don't have to fetch the proxy.

Pros

Cons

Discussion/Concerns from over-arching group

Future things.

→ Penalty for → Edit (from Deep Cloning).

→ id.

<u>EXHIBIT P</u>

as it existed on or before November 8, 2001

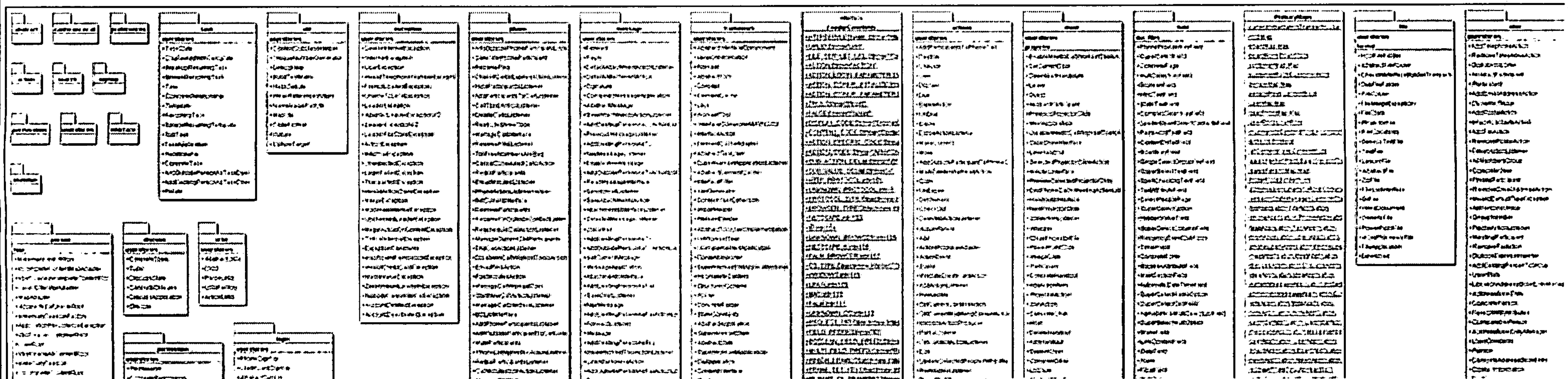
C:\Documents and Settings\mmckibben.LEADERTECH\My Documents\2000-ConceptionDocs\Leader Source C - Windows Internet Explorer

C:\Documents and Settings\mmckibben.LEADERTECH\My Documents\2000-ConceptionDocs\Leader Source Code Overview\leader\index.html

File Edit View Favorites Tools Help

C:\Documents and Settings\mmckibben.LEADERTECH\...

Page ▾ Tools ▾



- osapplication
  - abstract
  - action
  - actions
  - agenda
  - board
  - calendar
  - compile
  - conferencecall
  - constant
  - discuss
  - exception
  - field
  - file
  - frame
  - framework
  - help
  - idea

Overview Package Class Use Tree Index Help

Hierarchy For All Packages

Package Hierarchies:

Class Hierarchy

EXHIBIT Q

1999, 2000 and 2001 time period

Leader Technologies LLC
Computer Wizards Equity/Payment History

Net 365	Invoice Date	For	Invoice #	Total	Check	A/P	A/R	Ck #
	5/31/1999	May, 1999	1440	2,750.00	1,100.00			342
	7/1/1999	June, 1999	1442	8,531.25	3,412.50			366
	7/1/1999	Linux setup	1443	2,120.00	2,120.00			366
	8/1/1999	July, 1999	1447	19,525.00	7,810.00			385
	9/1/1999	August, 1999	1453	21,718.75	8,687.50			400
	10/1/1999	September, 1999 - 1	1458	20,000.00	8,000.00			289
X	10/1/1999	September, 1999 - 2	1459	70,156.25	0.00	28,062.50		
	11/2/1999	October, 1999 - 1	1465	20,000.00	8,000.00			290
X	11/2/1999	October, 1999 - 2	1466	35,875.00	0.00	14,350.00		
	12/2/1999	November 1999 - 1	1470	20,863.77	8,863.77	0.00	7,136.23	456
X	12/2/1999	November 1999 - 2	1471	6,250.00		2,500.00		
	1/4/2000	December, 1999 - 1	1478	40,000.00	16,000.00			491
X	1/4/2000	December, 1999 - 2	1477	14,950.00		5,980.00		
	2/1/2000	January, 2000 - 1	1484	40,019.49	8,883.26	0.00	(7,136.23)	2518
	2/1/2000	January, 2000 - 2	1485	44,200.00	17,680.00			2524
	3/2/2000	February, 2000 - 1	1486	40,021.08	16,021.08			2557
	3/2/2000	February, 2000 - 2	1487	42,881.25	17,152.50			2557
	4/10/2000	March, 2000	1497	40,875.85	16,875.85			2605
	4/10/2000	March, 2000	1498	23,906.25	9,562.50			2605
	5/2/2000	April, 2000	1502	40,198.99	16,198.99			2639
	5/2/2000	April, 2000	1503	34,177.50	13,671.00	0.00	6,329.00	294
***		April Salaries/May exps		48,843.00	48,843.00			2813
	7/12/2000	May Salaries/June exps	1513	33,266.00	33,266.00		(6,329.00)	2849
	8/1/2000	Advance for purch of comp eq		0.00	29,080.00		29,080.00	2866
	8/1/2000	June salaries/July exp	1517or152(	74,607.00	45,527.00		(29,080.00)	2896
	9/6/2000	July salaries/Aug exp	1523	29,204.00	29,204.00			2937
***		Aug salaries/Sept exp		47,027.00	47,027.00			3011
	11/6/2000	Sept salaries/Oct exp	1560	60,270.00	60,270.00			3045
	#######	October salaries	1566	43,763.00	43,763.00			3091
	12/1/2000	Nov salaries/Nov exps	1569	60,708.00	7,087.00	53,621.00		3091
					53,621.00	(53,621.00)		3158
	1/3/2001	December salaries	1570	48,430.88	15,000.00	33,430.88		3186
					33,430.88	(33,430.88)		3205
	1/3/2001	December expenses	1571	9,041.26	9,041.26			3158

Leader Technologies LLC
Computer Wizards Equity/Payment History

Net 365	Invoice Date	For	Invoice #	Total	Check	A/P	A/R	Ck #
	2/4/2001	January expenses	1577	10,199.62	10,199.62			3205
	2/10/2001	January salaries	1580	57,361.50	20,000.00	37,361.50		3235
					37,361.50	(37,361.50)		3249
	3/5/2001	February salaries	1586	52,845.35	20,000.00	32,845.35		3271
					32,845.35	(32,845.35)		3287
	3/5/2001	February expenses	1587	14,468.61	14,468.61			3249
	4/10/2001	March expenses	1591	13,043.81	13,043.81			3287
	3/30/2001	March salaries	1592	63,516.90	20,000.00	43,516.90		3324
					43,516.90	(43,516.90)		3328
	5/6/2001	April expenses	1599	8,222.70	8,222.70			3362
	5/9/2001	April salaries	1600	59,606.40	30,000.00	29,606.40		3362
					29,606.40	(29,606.40)		3380
	6/6/2001	May salaries	1604	56,377.08	27,000.00	29,377.08		3393
					29,377.08	(29,377.08)		3413
	6/4/2001	May expenses	1605	14,657.92	14,657.92			3380
	7/10/2001	June expenses	1614	25,390.64	25,390.64			3413
	7/10/2001	June salaries	1615	61,705.93	18,000.00	43,705.93		3435
					43,705.93	(43,705.93)		3449
	8/2/2001	July salaries	1616	55,017.49	20,000.00	35,017.49		3494
					35,017.49	(35,017.49)		3508
	8/8/2001	July expenses	1618	9,497.06	9,497.06			3449
	9/4/2001	August salaries	1622	49,817.03	23,000.00	26,817.03		3528
					26,817.03	(26,817.03)		3547
	9/12/2001	August expenses	1623	11,012.07	11,012.07			3508
	10/4/2001	September salaries	1628	52,357.37	32,500.00	19,857.37		3581
					19,857.37	(19,857.37)		3603
	#######	September expenses	1631	12,398.36	12,398.36			3565
	11/2/2001	October salaries	1632	58,724.02	36,000.00	22,724.02		3622
	#######	Oct expenses	1635	12,019.58	12,019.58			3603
	Totals			1,742,420.01	1,310,714.51	73,616.52	0.00	

*** Need invoices

Michael T. McKibben
Subject: Check No. 456, 12-31-99 - Computer Wizards Consulting, Inc.

Check to: Computer Wizards Consulting, Inc.

Amount: $16,000.00
Check No: 456
Date: 12-31-99

Payer: **LEADER**
LEADER TECHNOLOGIES LLC
5330 East Main Street, Suite 200
Columbus, Ohio 43213
(614) 890-1986 VOICE
(614) 864-7922 FAX

Comments:

For programming services

Special Note:

Please get telephone or Email confirmation before depositing this check. We are awaiting Federal Reserve processing on several deposits. Contact Mike McKibben (mmckibben@leader.com, 614-890-1986) or Tim Cooke (tcooke@leader.com, 614-890-1986).

MTM
Authorized: MTM
Check No.

Michael T. McKibben
Subject: Check No. 456, 12-31-99 - Computer Wizards Consulting, Inc.

Check to Computer Wizards Consulting, Inc.

Amount: $16,000.00
Check No: 456
Date: 12-31-99

Payer: **LEADER**
LEADER TECHNOLOGIES LLC
5330 East Main Street, Suite 200
Columbus, Ohio 43213
(614) 890-1986 VOICE
(614) 864-7922 FAX

Comments:

For programming services

Special Note:

Please get telephone or Email confirmation before depositing this check. We are awaiting Federal Reserve processing on several deposits. Contact Mike McKibben (mmckibben@leader.com, 614-890-1986) or Tim Cooke (tcooke@leader.com, 614-890-1986).

MTM
Authorized: MTM
Check No.

Michael T. McKibben

From: Jeff R. Lamb [jeff@computerwizards.com]
Sent: Tuesday, March 21, 2000 6:39 PM
To: mmckibben@leader.com
Subject: Re: Short term need

That's great. Talk to you tomorrow.

"Michael T. McKibben" wrote:

> Jeff:
>
> The answer is yes.
>
> Let's sort out the details tomorrow when you're here.
>
> Have a safe trip.
>
> Mike
>
> -----Original Message-----
> **From:** Jeff R. Lamb [mailto:jeff@computerwizards.com]
> Sent: Tuesday, March 21, 2000 3:44 PM
> To: Mike McKibben; Brad Whiteman; Ben Zacks
> Subject: Short term need
>
> pd 3-22-00 ck # 2557
>
> To address CWC short term needs:
> 1) Can I get a check tomorrow for $33173.58 (Feb cash portion of invoices)?
> 2) Can we agree on a date that Leader will commit to covering both net 30 and net 365 cash portions of invoices for all hours that CWC works regardless of merger or not? What I'm looking for is a date that I know you won't try to lessen our effort before. This gives me the breathing room I need to concentrate entirely upon Leader.
>
> --
> Jeff R. Lamb
> jeff@computerwizards.com
> Computer Wizards Consulting
> http://www.computerwizards.com

--
Jeff R. Lamb
jeff@computerwizards.com
Computer Wizards Consulting
http://www.computerwizards.com

mputer Wizards Co		erhead Analysis							
	Rates	Jeff, Mark, Andrew, Wendy, Eric, Bud, Dave, Vonda							
aries & Benefits									
ary (April)		26087							
ial Security	0.06	1617							
licare	0.01	378							
.e Unemployment	0.03	52							
eral Unemployment	0.01	28							
enses broken out on attachment		13157							
va One Tickets		6385							
ane tickets		1138							
S&B Subtotal		48843							
eral & Admin									
G&A Subtotal		0	*$- per person-hour*						
Subtotal		$48,843	$-	$-	$-	$-	$-	$-	$-
able Real Hours		200	160	191	100	40	200	40	40

Exp/Mo	**$48,843**	*(S&B + G&A)*
Hours/Mon	971	*(assumes 200 hours for Jeff)*
Rate	$50.30	
Days/Mo	22	
Hrs/Day	8	
Hrs/Mo	176	

MTW

Base $/Hr	$244.22	$-	$-	$-	$-	$-	$-	$-
OH $/Hr	$-	$-	$-	$-	$-	$-	$-	$-
Total $/Hr	$244.22	$-	$-	$-	$-	$-	$-	$-

ojection. Everything else is historical (last 3 or all of 1999 as applicible) or factually based

May 2000

Due Dlgnc		Apprvd by	
Posted by	gp	Dr acct.	Amount
PD Chk #	2813	6080	48843.00
Date	6/30/00		

cc to:

06/28/00

Computer Wizards
Expenses by Vendor Summary
May 2000

	May '00
Airtouch Cellular	71.91
Ameritech	374.15
Bureau of Workers' Compensation for Ohio	14.06
Daniel Cramer	3,000.00
Donet	1,491.00
Goldshot, Bragg & Associates	2,900.00
Humana, Inc.	1,735.08
Imation	-10.00
Intuit	-50.00
Ladco Leasing	45.35
Mail Boxes Etc.	59.90
Max and Erma's	24.10
MindSpring	39.90
New Mexico Department of Labor	50.00
Omni Sky	-5.62
Palmnet	10.38
QuickBooks Online Payroll Service	74.55
Smith Barney	2,832.87
Sprint	102.97
Staples	47.98
Treasurer, State of Ohio	23.40
US West Communications	112.78
Voyager	-19.95
Walmart	182.47
ZDNet	49.95
TOTAL	13,167.23

BV Plus One Tickets 263855

LEADER TECHNOLOGIES LLC 2896

Computer Wizards 08/18/2000

08/01/2000 Bill # 45,527.00

Deposit
Aug 19, 2000

BankOne - Checking June salaries, July expenses 45,527.00

LEADER TECHNOLOGIES LLC 2518

Computer Wizards 2/26/2000

Jan. 2000 8,883.26

BankOne-Checking Jan 2000 8,883.26

ADP

EMPLOYER SERVICES

CONFIDENTIAL TO BE OPENED BY PAYROLL MANAGER ONLY!

EMPLOYER SERVICES

ANNUAL FORMS

EMPLOYER REFERENCE
AND
FILING COPIES

5WD

COMPANY CODE

CONFIDENTIAL TO BE OPENED BY PAYROLL MANAGER ONLY!

a Control number	Void	OMB No. 1545-0008
0005 5WD	☐	5WD 0005

b Employer identification number 31-1562602	1 Wages, tips, other compensation 4000.00	2 Federal income tax withheld 485.00
c Employer's name, address, and ZIP code LEADER TECHNOLOGIES LLC 5330 E MAIN ST SUITE 200 COLUMBUS, OH 43213	3 Social security wages 4000.00	4 Social security tax withheld 248.00
	5 Medicare wages and tips 4000.00	6 Medicare tax withheld 58.00
	7 Social security tips	8 Allocated tips
d Employee's social security number [redacted]	9 Advance EIC payment	10 Dependent care benefits
e Employee's name, address, and ZIP code ANDREW [redacted]	11 Nonqualified plans	12 Benefits included in box 1
	13 See instrs. for box 13	14 Other
	15 Statutory employee ☐ Deceased ☐ Pension plan ☐ Legal rep. ☐ Deferred compensation ☐	

16 State	Employer's state I.D. no.	17 State wages, tips, etc.	18 State income tax	19 Locality name	20 Local wages, tips, etc.	21 Local income tax
[redacted]		4000.00	107.89			

Form **W-2** Wage and Tax Statement **1999**

Copy D For Employer

Department of the Treasury—Internal Revenue Service

For Privacy Act and Paperwork Reduction Act Notice, see separate instructions.

a Control number	Void	OMB No. 1545-0008
0004 5WD	☐	5WD 0004

b Employer identification number 31-1562602	1 Wages, tips, other compensation 4000.00	2 Federal income tax withheld 726.96
c Employer's name, address, and ZIP code LEADER TECHNOLOGIES LLC 5330 E MAIN ST SUITE 200 COLUMBUS, OH 43213	3 Social security wages 4000.00	4 Social security tax withheld 248.00
	5 Medicare wages and tips 4000.00	6 Medicare tax withheld 58.00
	7 Social security tips	8 Allocated tips
d Employee's social security number [redacted]	9 Advance EIC payment	10 Dependent care benefits
e Employee's name, address, and ZIP code SKY W[redacted]	11 Nonqualified plans	12 Benefits included in box 1
	13 See instrs. for box 13	14 Other
	15 Statutory employee ☐ Deceased ☐ Pension plan ☐ Legal rep. ☐ Deferred compensation ☐	

16 State	Employer's state I.D. no.	17 State wages, tips, etc.	18 State income tax	19 Locality name	20 Local wages, tips, etc.	21 Local income tax
[redacted]		4000.00	196.61			

Form **W-2** Wage and Tax Statement **1999**

Copy D For Employer

Department of the Treasury—Internal Revenue Service

For Privacy Act and Paperwork Reduction Act Notice, see separate instructions.

a Control number	Void	OMB No. 1545-0008
0001 5WD	☐	5WD 0001

b Employer identification number	31-1562602	1 Wages, tips, other compensation	14368.24
		2 Federal income tax withheld	2450.96
c Employer's name, address, and ZIP code	LEADER TECHNOLOGIES LLC 5330 E MAIN ST SUITE 200 COLUMBUS, OH 43213	3 Social security wages	14368.24
		4 Social security tax withheld	890.83
		5 Medicare wages and tips	14368.24
		6 Medicare tax withheld	208.34
		7 Social security tips	
		8 Allocated tips	
d Employee's social security number	[redacted]	9 Advance EIC payment	
		10 Dependent care benefits	
e Employee's name, address, and ZIP code	MICHAEL J G[redacted]	11 Nonqualified plans	
		12 Benefits included in box 1	
		13 See instrs. for box 13	
		14 Other	

15 Statutory employee ☐ Deceased ☐ Pension plan ☐ Legal rep. ☐ Deferred compensation ☐

16 State	Employer's state I.D. no.	17 State wages, tips, etc.	18 State income tax	19 Locality name	20 Local wages, tips, etc.	21 Local income tax
[redacted]		14368.24	530.76	WHITEHLL	14368.24	287.36

Form **W-2** Wage and Tax Statement 1999

Copy D For Employer

Department of the Treasury—Internal Revenue Service

For Privacy Act and Paperwork Reduction Act Notice, see separate instructions.

a Control number	Void	OMB No. 1545-0008
0003 5WD	☐	5WD 0003

b Employer identification number	31-1562602	1 Wages, tips, other compensation	65786.28
		2 Federal income tax withheld	10660.37
c Employer's name, address, and ZIP code	LEADER TECHNOLOGIES LLC 5330 E MAIN ST SUITE 200 COLUMBUS, OH 43213	3 Social security wages	65786.28
		4 Social security tax withheld	4078.75
		5 Medicare wages and tips	65786.28
		6 Medicare tax withheld	953.90
		7 Social security tips	
		8 Allocated tips	
d Employee's social security number	[redacted]	9 Advance EIC payment	
		10 Dependent care benefits	
e Employee's name, address, and ZIP code	MICHAEL T M[redacted]	11 Nonqualified plans	
		12 Benefits included in box 1	
		13 See instrs. for box 13	
		14 Other	

15 Statutory employee ☐ Deceased ☐ Pension plan ☐ Legal rep. ☐ Deferred compensation ☐

16 State	Employer's state I.D. no.	17 State wages, tips, etc.	18 State income tax	19 Locality name	20 Local wages, tips, etc.	21 Local income tax
[redacted]		65786.28	3277.54	WHITEHLL	65786.28	1445.72

Form **W-2** Wage and Tax Statement 1999

Copy D For Employer

Department of the Treasury—Internal Revenue Service

For Privacy Act and Paperwork Reduction Act Notice, see separate instructions.

a Control number	0002 5WD
Void	☐
OMB No. 1545-0008	5WD 0002
b Employer identification number	31-1562602
c Employer's name, address, and ZIP code	LEADER TECHNOLOGIES LLC 5330 E MAIN ST SUITE 200 COLUMBUS, OH 43213
d Employee's social security number	[redacted]
e Employee's name, address, and ZIP code	BRADFORD L W[redacted]
1 Wages, tips, other compensation	45208.31
2 Federal income tax withheld	7593.53
3 Social security wages	45208.31
4 Social security tax withheld	2802.92
5 Medicare wages and tips	45208.31
6 Medicare tax withheld	655.52
7 Social security tips	
8 Allocated tips	
9 Advance EIC payment	
10 Dependent care benefits	
11 Nonqualified plans	
12 Benefits included in box 1	
13 See instrs. for box 13	
14 Other	
15 Statutory employee ☐ Deceased ☐ Pension plan ☐ Legal rep. ☐ Deferred compensation ☐	

16 State	Employer's state I.D. no.	17 State wages, tips, etc.	18 State income tax	19 Locality name	20 Local wages, tips, etc.	21 Local income tax
[redacted]		45208.31	2041.62	WHITEHLL	45208.31	904.19

Form **W-2** Wage and Tax Statement **1999**

Copy D For Employer

Department of the Treasury—Internal Revenue Service

For Privacy Act and Paperwork Reduction Act Notice, see separate instructions.

a Control number	0002 5WD
Void	☐
OMB No. 1545-0008	5WD 0002
b Employer identification number	31-1562602
c Employer's name, address, and ZIP code	LEADER TECHNOLOGIES LLC 5330 E MAIN ST SUITE 200 COLUMBUS, OH 43213
d Employee's social security number	[redacted]
e Employee's name, address, and ZIP code	BRADFORD L W[redacted]
1 Wages, tips, other compensation	
2 Federal income tax withheld	
3 Social security wages	
4 Social security tax withheld	
5 Medicare wages and tips	
6 Medicare tax withheld	
7 Social security tips	
8 Allocated tips	
9 Advance EIC payment	
10 Dependent care benefits	
11 Nonqualified plans	
12 Benefits included in box 1	
13 See instrs. for box 13	
14 Other	444.50 SD2307
15 Statutory employee ☐ Deceased ☐ Pension plan ☐ Legal rep. ☐ Deferred compensation ☐	

16 State	Employer's state I.D. no.	17 State wages, tips, etc.	18 State income tax	19 Locality name	20 Local wages, tips, etc.	21 Local income tax

Form **W-2** Wage and Tax Statement **1999**

Copy D For Employer

Department of the Treasury—Internal Revenue Service

For Privacy Act and Paperwork Reduction Act Notice, see separate instructions.

a Control number	Void	OMB No. 1545-0008	
5WD	☐	5WD	

b Employer identification number	1 Wages, tips, other compensation	2 Federal income tax withheld
31-1562602	133362.83	21916.82
c Employer's name, address, and ZIP code	3 Social security wages	4 Social security tax withheld
LEADER TECHNOLOGIES LLC 5330 E MAIN ST SUITE 200 COLUMBUS, OH 43213	133362.83	8268.50
	5 Medicare wages and tips	6 Medicare tax withheld
	133362.83	1933.76
	7 Social security tips	8 Allocated tips
d Employee's social security number	9 Advance EIC payment	10 Dependent care benefits
e Employee's name, address, and ZIP code	11 Nonqualified plans	12 Benefits included in box 1
	13 See instrs. for box 13	14 Other
	15 Statutory employee ☐ Deceased ☐ Pension plan ☐ Legal rep. ☐ Deferred compensation ☐	

16 State	Employer's state I.D. no.	17 State wages, tips, etc.	18 State income tax	19 Locality name	20 Local wages, tips, etc.	21 Local income tax

Form **W-2** Wage and Tax Statement **1999**

Copy D For Employer

Department of the Treasury—Internal Revenue Service

For Privacy Act and Paperwork Reduction Act Notice, see separate instructions.

********************************** TOTALS ******************************

For: Batch No. 071
For: Company 5WD

6	TOTAL EMPLOYEES
444.50	SD2307 (Box 14)
133,362.83	State Wages (Box 17)
6,154.42	State Income Tax (Box 18)
125,362.83	Local Wages (Box 20)
2,637.27	Local Income Tax (Box 21)

Description	Amount	Description	Amount
** FEDERAL			
Wages Tips Other Comp.	133,362.83	Federal Income Tax	21,916.82
Social Security Wages	133,362.83	Social Security Tax	8,268.50
Medicare Wages & Tips	133,362.83	Medicare Tax	1,933.76
** STATE			
CA Wages	8,000.00	CA Income Tax	304.50
OH Wages	125,362.83	OH Income Tax	5,849.92
** LOCAL			
Whitehll Wages	125,362.83	Whitehll Income Tax	2,637.27
** OTHER			
		2307	444.50

EXPLANATION OF KEY BOXES

Box:

1. WAGES, TIPS, OTHER COMPENSATION. This includes regular wages, tips, sick pay, other compensation amounts, the cost of group-term life insurance in excess of $50,000 and any other fringe benefits subject to federal income tax.

2. FEDERAL INCOME TAX WITHHELD

3. SOCIAL SECURITY WAGES. Total wages paid subject to employee social security tax to a maximum of $72,600, including taxable employee business expense payments reported in box 1, contributions to certain qualified cash or deferred compensation plans, and the value of fringe benefits. NOT INCLUDED are Allocated tips (box 8) or Social Security tips (box 7).

4. SOCIAL SECURITY TAX WITHHELD. This total amount has been withheld from the employee's paycheck or withheld on the employee's behalf.

5. MEDICARE WAGES AND TIPS. The wages and tips subject to Medicare tax are the same as those subject to social security tax, except that there is no wage base limit for Medicare tax.

6. MEDICARE TAX WITHHELD. The total employee Medicare tax (not including employer's share) withheld or paid on behalf of the employee.

7. SOCIAL SECURITY TIPS. When the total of tips and wages subject to employee social security taxes amounts to $72,600, no additional tips will be shown in this box.

8. ALLOCATED TIPS. Allocated tips, if any, will appear in this box. This amount will NOT have been added to any other box.

9. ADVANCE EIC (Earned Income Credit) PAYMENT.

10. DEPENDENT CARE BENEFITS. The total amount of dependent care benefits paid or incurred for the employee is shown here, including any amount in excess of the $5,000 exclusion. Box 1 also includes any excess over the $5,000 amount.

11. NONQUALIFIED PLANS. In this box appears the total amount of nonqualified distributions to an employee. If there are only distributions from 457(b) plans, they will be shown as a separate figure with code G. The same amounts are included in wages (box 1).

13. EMPLOYER USE. Amounts reported in this box will be explained by a letter code from the following table:

    A - Uncollected social security or RRTA tax on tips
    B - Uncollected Medicare tax on tips
    C - Group-term life cost (coverage over $50,000)
    D - Section 401(k) contributions including the amount deferred under a SIMPLE retirement account that is part of a 401(k) arrangement
    E - Section 403(b) contributions
    F - Section 408(k)(6) contributions
    G - Section 457(b) contributions
    H - Section 501(c)(18)(D) contributions
    J - Sick pay not includible as income
    K - 20 % excise tax on excess golden parachute payments
    L - Substantiated employee business expenses reimbursements (non-taxable)
    M - Uncollected social security or RRTA tax on cost of group-term life insurance coverage over $50,000 (former employees only)
    N - Uncollected Medicare tax on cost of group-term life insurance coverage over $50,000 (former employees only)
    P - Excludable moving expense reimbursements paid directly to an employee
    Q - Military employee basic housing, subsistence and combat zone compensation
    R - Employer contributions to a medical savings account (MSA)
    S - Section 408(p) employee salary reduction contributions to a SIMPLE retirement account. However, if the SIMPLE is part of a 401(k) arrangement, the amount is reported using code D.
    T - Employer - provided adoption benefits for the amount paid or expenses incurred by an employer under an adoption assistance program. Also includes benefits from pre-tax contributions made by an employee to a Section 125 adoption plan account.

15. PENSION PLAN. This box is checked if the employee is an active participant (for any part of the year) in a qualified retirement plan, including a simplified employee pension (SEP) plan maintained by the employer.

    DEFERRED COMPENSATION. This box is checked if an employee has made an elective deferral to a salary reduction plan, cash or deferred arrangement, or a retirement plan under Sections 401(k), 403(b), 408(k), 408(p), 501(c), or 457(b). Also see the explanation of box 13.

5WD
LEADER TECHNOLOGIES LLC
5330 E MAIN ST SUITE 200
COLUMBUS OH 43213

Dear Client,

Enclosed are the paper copies of your W-2s. You must distribute the employee copies of the W-2s by January 31.

As one of the many benefits of ADP's Tax Filing Service, ADP will be filing your annual returns for you. ADP's Tax Filing Service will file federal, state, and city W-2s and W-3s for each tax that was deposited and filed throughout the year. To verify annual tax filing responsibilities, refer to your Quarterly Statement of Deposits and Filings that was issued by ADP's Tax Filing Service.

If you need to make changes to the enclosed totals or if you have any questions, please contact your client service representative immediately.

Thank you for your cooperation.

Reference: #024

133362.83	21916.83
3 Social security wages 133362.83	4 Social security tax withheld 8268.50
5 Medicare wages and tips 133362.83	6 Medicare tax withheld 1933.76

a Control Number	Dept.	Corp.	Employer use only
5WD			7

c ...oyer's name, address, and ZIP code

5WD

b Employer's FED ID number 31-1562602	d Employee's SSA number
7 Social security tips	8 Allocated tips
9 Advance EIC payment	10 Dependent care benefits
11 Nonqualified plans	12 Benefits included in box 1
13 See instrs. for box 13	14 Other

15 Stat emp.	Deceased	Pension plan	Legal rep.	Deferred comp.

e/f Employee's name, address and ZIP code

16 State	Employer's state ID no.	17 State wages, tips, etc.
		133362.83

18 State income tax 6154.42	19 Locality name
20 Local wages, tips, etc. 125362.83	21 Local income tax 2637.27

Employee Reference Copy

W-2 Wage and Tax Statement **1999**

OMB No. 1545-0008

Cop... employee's records.

Best Available Copy

COMPANY 5WD

6 Total Employees
7 Total Forms Count

444.50 SD2307 (Box 14)

************ T O T A L S ************
For : BATCH NO. 071
For : COMPANY 5WD
****

FOLD AND DETACH HERE

TOTAL PAGE

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7✓

Employee Information		Earnings	Rate	Hours	Amount	Federal Taxes		State/Local Taxes		Deductions	Net Pay	Check Cleared? ☑
[redacted]MICHA[redacted]	#0003 Married/08	Gross SALARY			9,398.04 9,398.04	SS/Med Fed Wt	718.95 1,522.91	OH State Whitehll	468.22 187.96		Net Pay Check #90011682	6500.00 ☐
W[redacted],BRADFORD L	#0002 Married/02	Gross SALARY			6,458.33 6,458.33	SS/Med Fed Wt	494.07 1,084.79	OH State 2307 Whitehll	291.66 63.50 129.17		Net Pay	4395.14 Direct Deposit
Department Totals		Gross SALARY			15,856.37 15,856.37	SS/Med Fed Wt	1,213.02 2,607.70	OH State 2307 Whitehll	759.88 63.50 317.13		2 Pays	10895.14
CLIENT TOTALS		Gross SALARY			15,856.37 15,856.37	SS/Med Fed Wt	1,213.02 2,607.70	OH State 2307 Whitehll	759.88 63.50 317.13		1 Chk 1 Dep 2 Pays	6,500.00 4,395.14 10,895.14

Payroll Statistics

Employees Paid:	2
Active Employees Not Paid:	1
Terminated Employees Paid:	0

RECEIVED
FEB - 3 2000
BY:

Replacement Summary – original never rec'd or misplaced

Client: 5WD
LEADER TECHNOLOGIES LLC

ADP EASYPAY

Payroll Register

Period Covered: 12/01/1999 - 12/31/1999
Check Date: 12/31/1999

Run: 9
Week: 52
Qtr: 4
Page: 1

Department	Earnings	Hours	Amount	Federal Taxes		State/Local Taxes		Deductions	Net Pay	
Department										
This Pay Totals	Gross		15,856.37	SS/Med	1,213.02	OH State	759.88		1 Chk	6,500.00
	SALARY		15,856.37	Fed Wt	2,607.70	2307	63.50		1 Dep	4,395.14
						Whitehll	317.13			
Month-to-Date Totals	Gross		15,856.37	SS/Med	1,213.02	STATE	759.88		2 Checks	10,895.14
	SALARY		15,856.37	Fed Wt	2,607.70	CTY/LOC	317.13			
						CY2/LC2	63.50			
CLIENT THIS PAY TOTALS	Gross		15,856.37	SS/Med	1,213.02	OH State	759.88		1 Chk	6,500.00
	SALARY		15,856.37	Fed Wt	2,607.70	2307	63.50		1 Dep	4,395.14
						Whitehll	317.13		2 Pays	10,895.14
CLIENT MONTH-TO-DATE TOTALS	Gross		15,856.37	SS/Med	1,213.02	OH State	759.88		2 Checks	10,895.14
	SALARY		15,856.37	Fed Wt	2,607.70	2307	63.50			
						Whitehll	317.13			
CLIENT MONTH-TO-DATE EMPLOYER TOTALS				SS/Med	1,213.02					

Payroll Totals

Earnings	Amount	Federal Taxes		State/Local Taxes		Deductions	Net Pay		
Gross	15,856.37	SS/Med	1,213.02	OH State	759.88		1	Chk	6,500.00
SALARY	15,856.37	Fed Wt	2,607.70	2307	63.50		1	Dep	4,395.14
				Whitehll	317.13		2	Pays	10,895.14
Total Gross	**15,856.37**	**Total Withholdings**			**4,961.23**	**Total Deductions**	**2**	**Total Net**	**10,895.14**

Taxes

Tax Type	Deposit Responsibility	Total Taxes	Employer This Pay	Employee This Pay	Taxable Wages	# of Employees	Tax Rate	ID Number
Social Security/Medicare	ADP	2,426.04	1,213.02	1,213.02	15,856.37	2		311562602
Federal Withholding	ADP	2,607.70		2,607.70	15,856.37	2		311562602
Federal Deposit		**5,033.74**	**1,213.02**	**3,820.72**				
Federal Unemployment	ADP					2	.8000 %	311562602
OH State Income Tax	ADP	759.88		759.88	15,856.37	2		*Missing Tax ID #*
OH Unemployment	ADP					2	2.7000 %	1191091-00-4
Whitehall	ADP	317.13		317.13	15,856.37	2		
Pickerington LSD	ADP	63.50		63.50	6,458.33	1		
ADP Responsibility		**6,174.25**	**1,213.02**	**4,961.23**				
Total Taxes		**6,174.25**	**1,213.02**	**4,961.23**				

Cash Flow Summary

	Amount	Account Number	Bank Number	Bank Name
Checks	6,500.00			
Net Direct Deposits	4,395.14			
Taxes - ADP Resp.	6,174.25			
Cash Requirements	**17,069.39**	[redacted]	[redacted]	[redacted]

Messages

The IRS imposes a $50 fine for each W2 or 1099 submitted with missing or incorrect social security or tax identification numbers. Please verify the information in the Tax Rate and ID Number columns on this report, and provide the missing information to your client service representative.

We are responsible for depositing your payroll taxes listed above.

COMPUTER Wizards
4300 Bitterroot Drive
Westerville, Ohio 43081

Invoice 1566

DATE	11/17/2000
TERMS	Net 30

BILL TO

Leader Technologies
921 Eastwind Dr, Ste. 118
Westerville, OH 43081

PROJECT

QUANTITY	DESCRIPTION	RATE	AMOUNT
875.26	Consulting	50.00	43,763.00
	Ohio State Sales Tax	6.00%	0.00
	Covers October 2000 Hours Worked	**Total**	$43,763.00

If you have any questions about your bill, please contact us at: (614) 818-9088 or accounting@computerwizards.com

Computer Wizards Consulting Overhead Analysis

	Rates	**Jeff, Teresa, Mark, Andrew, Wendy, Eric, Bud, Dave, Vond**			
Salaries & Benefits					
Salary (October Hours)		45874			
Social Security	0.062	2844			
Medicare	0.0145	665			
State Unemployment	0.027	52			
Federal Unemployment	0.008	28			
Expenses broken out on attachment		0			
Postage		0			
Amount overbiled for Sept. Hrs.		-5700			
S&B Subtotal		43763			
General & Admin					
G&A Subtotal		0	$ -	*per person-hour*	
S&B Subtotal		$ 43,763	$ -	$ -	$ -
Available Real Hours		200	160	191	100
	Exp/Mo	**$ 43,763**	*(S&B + G&A)*		
	Hours/Mon	**971**	*(Assumes 200 hours for Jeff)*		
	Rate	**$ 45.07**			
	Days/Mo	22			
	Hrs/Day	8			
	Hrs/Mo	176			
Base	$/Hr	$ 218.81	$ -	$ -	$ -
OH	$/Hr	$ -	$ -	$ -	$ -
Total	$/Hr	$ 218.81	$ -	$ -	$ -

* = Projection. Everything else is historical (last 3 or all of 1999 as applicible) or factually based

12/01/00

Computer Wizards
Payroll Summary
November 2000

	Andrew M.[redacted]			Charles D [redacted]		
	Hours	Rate	Nov '00	Hours	Rate	Nov '00
Employee Wages, Taxes and Adjustments						
Gross Pay						
Salary			4,966.00			0.00
Hourly Regular Rate			0.00	8.11	30.98	251.25
Total Gross Pay			4,966.00			251.25
Deductions from Gross Pay						
Simple IRA			-100.00			0.00
Total Deductions from Gross Pay			-100.00			0.00
Adjusted Gross Pay			4,866.00			251.25
Taxes Withheld						
Federal Withholding			-692.00			0.00
Medicare Employee			-72.00			-3.64
Social Security Employee			-307.90			-15.58
CO - Withholding			0.00			0.00
NC - Withholding			0.00			0.00
NM - Withholding			0.00			0.00
OH - Withholding			0.00			-1.59
OK - Withholding			-259.00			0.00
OH - School District			0.00			0.00
Total Taxes Withheld			-1,330.90			-20.81
Net Pay			3,535.10			230.44
Employer Taxes and Contributions						
Federal Unemployment			0.00			2.01
Medicare Company			72.00			3.64
Social Security Company			307.90			15.58
CO - Department of Labor			0.00			0.00
NC - Unemployment Company			0.00			0.00
NM - Unemployment Company			0.00			0.00
OH - Unemployment Company			0.00			6.78
OK - Unemployment Company			0.00			0.00
NC - Training & Reemployment			0.00			0.00
Total Employer Taxes and Contributions			379.90			28.01

12/01/00

Computer Wizards
Payroll Summary
November 2000

	Eric M [redacted]			Jeff R [redacted]		
	Hours	Rate	Nov '00	Hours	Rate	Nov '00
Employee Wages, Taxes and Adjustments						
Gross Pay						
Salary			0.00			6,696.00
Hourly Regular Rate	112.8	30.98	3,494.54			0.00
Total Gross Pay			3,494.54			6,696.00
Deductions from Gross Pay						
Simple IRA			-100.00			-500.00
Total Deductions from Gross Pay			-100.00			-500.00
Adjusted Gross Pay			3,394.54			6,196.00
Taxes Withheld						
Federal Withholding			-429.00			-999.00
Medicare Employee			-50.68			-97.09
Social Security Employee			-216.66			-415.15
CO - Withholding			0.00			0.00
NC - Withholding			0.00			0.00
NM - Withholding			0.00			0.00
OH - Withholding			-118.85			-276.83
OK - Withholding			0.00			0.00
OH - School District			0.00			0.00
Total Taxes Withheld			-815.19			-1,788.07
Net Pay			2,579.35			4,407.93
Employer Taxes and Contributions						
Federal Unemployment			0.00			0.00
Medicare Company			50.68			97.09
Social Security Company			216.66			415.15
CO - Department of Labor			0.00			0.00
NC - Unemployment Company			0.00			0.00
NM - Unemployment Company			0.00			0.00
OH - Unemployment Company			0.00			0.00
OK - Unemployment Company			0.00			0.00
NC - Training & Reemployment			0.00			0.00
Total Employer Taxes and Contributions			267.34			512.24

12/01/00

Computer Wizards
Payroll Summary
November 2000

	Mark C A[redacted]			Stanley J B[redacted]		
	Hours	Rate	Nov '00	Hours	Rate	Nov '00
Employee Wages, Taxes and Adjustments						
Gross Pay						
Salary			5,359.54			6,454.06
Hourly Regular Rate			0.00			0.00
Total Gross Pay			5,359.54			6,454.06
Deductions from Gross Pay						
Simple IRA			-150.00			-200.00
Total Deductions from Gross Pay			-150.00			-200.00
Adjusted Gross Pay			5,209.54			6,254.06
Taxes Withheld						
Federal Withholding			-854.00			-1,146.00
Medicare Employee			-77.72			-93.58
Social Security Employee			-332.30			-400.15
CO - Withholding			0.00			-284.00
NC - Withholding			-347.49			0.00
NM - Withholding			0.00			0.00
OH - Withholding			0.00			0.00
OK - Withholding			0.00			0.00
OH - School District			0.00			0.00
Total Taxes Withheld			-1,611.51			-1,923.73
Net Pay			3,598.03			4,330.33
Employer Taxes and Contributions						
Federal Unemployment			0.00			0.00
Medicare Company			77.72			93.58
Social Security Company			332.30			400.15
CO - Department of Labor			0.00			0.00
NC - Unemployment Company			0.00			0.00
NM - Unemployment Company			0.00			0.00
OH - Unemployment Company			0.00			0.00
OK - Unemployment Company			0.00			0.00
NC - Training & Reemployment			0.00			0.00
Total Employer Taxes and Contributions			410.02			493.73

12/01/00

Computer Wizards
Payroll Summary
November 2000

	Steven E. H[redacted]			Teresa A [redacted]		
	Hours	Rate	Nov '00	Hours	Rate	Nov '00
Employee Wages, Taxes and Adjustments						
Gross Pay						
Salary			7,740.00			6,696.00
Hourly Regular Rate			0.00			0.00
Total Gross Pay			7,740.00			6,696.00
Deductions from Gross Pay						
Simple IRA			-500.00			-3,000.00
Total Deductions from Gross Pay			-500.00			-3,000.00
Adjusted Gross Pay			7,240.00			3,696.00
Taxes Withheld						
Federal Withholding			-1,161.00			-404.00
Medicare Employee			-112.23			-97.09
Social Security Employee			-479.88			-415.15
CO - Withholding			0.00			0.00
NC - Withholding			0.00			0.00
NM - Withholding			0.00			0.00
OH - Withholding			-346.60			-135.51
OK - Withholding			0.00			0.00
OH - School District			0.00			0.00
Total Taxes Withheld			-2,099.71			-1,051.75
Net Pay			5,140.29			2,644.25
Employer Taxes and Contributions						
Federal Unemployment			56.00			2.43
Medicare Company			112.23			97.09
Social Security Company			479.88			415.15
CO - Department of Labor			0.00			0.00
NC - Unemployment Company			0.00			0.00
NM - Unemployment Company			0.00			0.00
OH - Unemployment Company			208.98			0.00
OK - Unemployment Company			0.00			0.00
NC - Training & Reemployment			0.00			0.00
Total Employer Taxes and Contributions			857.09			514.67

12/01/00

Computer Wizards
Payroll Summary
November 2000

	Vonda K [redacted]			Wendy Y A[redacted]		
	Hours	Rate	Nov '00	Hours	Rate	Nov '00
Employee Wages, Taxes and Adjustments						
Gross Pay						
Salary			0.00			0.00
Hourly Regular Rate	61.32	15.00	919.80	94.35	26.00	2,453.10
Total Gross Pay			919.80			2,453.10
Deductions from Gross Pay						
Simple IRA			-50.00			0.00
Total Deductions from Gross Pay			-50.00			0.00
Adjusted Gross Pay			869.80			2,453.10
Taxes Withheld						
Federal Withholding			-50.00			-287.00
Medicare Employee			-13.34			-35.57
Social Security Employee			-57.02			-152.09
CO - Withholding			0.00			0.00
NC - Withholding			0.00			0.00
NM - Withholding			-16.83			0.00
OH - Withholding			0.00			-128.48
OK - Withholding			0.00			0.00
OH - School District			0.00			0.00
Total Taxes Withheld			-137.19			-603.14
Net Pay			**732.61**			**1,849.96**
Employer Taxes and Contributions						
Federal Unemployment			7.36			0.00
Medicare Company			13.34			35.57
Social Security Company			57.02			152.09
CO - Department of Labor			0.00			0.00
NC - Unemployment Company			0.00			0.00
NM - Unemployment Company			23.49			0.00
OH - Unemployment Company			0.00			0.00
OK - Unemployment Company			0.00			0.00
NC - Training & Reemployment			0.00			0.00
Total Employer Taxes and Contributions			**101.21**			**187.66**

12/01/00

Computer Wizards
Payroll Summary
November 2000

	Hours	Rate	TOTAL Nov '00
Employee Wages, Taxes and Adjustments			
Gross Pay			
Salary			37,911.60
Hourly Regular Rate	276.58		7,118.69
Total Gross Pay			45,030.29
Deductions from Gross Pay			
Simple IRA			-4,600.00
Total Deductions from Gross Pay			-4,600.00
Adjusted Gross Pay			40,430.29
Taxes Withheld			
Federal Withholding			-6,022.00
Medicare Employee			-652.94
Social Security Employee			-2,791.88
CO - Withholding			-284.00
NC - Withholding			-347.49
NM - Withholding			-16.83
OH - Withholding			-1,007.86
OK - Withholding			-259.00
OH - School District			0.00
Total Taxes Withheld			-11,382.00
Net Pay			29,048.29
Employer Taxes and Contributions			
Federal Unemployment			67.80
Medicare Company			652.94
Social Security Company			2,791.88
CO - Department of Labor			0.00
NC - Unemployment Company			0.00
NM - Unemployment Company			23.49
OH - Unemployment Company			215.76
OK - Unemployment Company			0.00
NC - Training & Reemployment			0.00
Total Employer Taxes and Contributions			3,751.87

Q+ Vacation

+ $1,775.15 = $46,805.44 = $50.00

936.11 hrs.
- 18.63 tws hrs.
917.48
x $50.00
$45,874.00

TRANSMISSION REPORT

:MAIL BOXES ETC 751 (DEC 06 '00 09:50AM)

DATE	START TIME	REMOTE TERMINAL IDENTIFICATION	MODE	TIME	RESULTS	TOTAL PAGES	DEPT. CODE	FILE NO.
DEC 06	09:48AM	6148647922	G3E ST	02'01"	OK	09		

MAIL BOXES ETC.

MINUTE MAIL

Public FAX Service

Sent To:
Company: Leader

Attention: Jeff Lamb

Phone Number: (   ) ________

FAX Number: (614) 864-7922

Total Pages Sent -
(Including This Cover Sheet): 9

MBE MAIL BOXES ETC.®

From:
Company: CWC

Name: Vonda Barnhart

Phone Number: (   ) ________

FAX Transmission from:
MBE #751
3301-R Coors Road, N.W.
Albuquerque, NM 87120-1229
Phone: (505) 831-1001 Fax (505) 831-1031

Payroll Totals

Earnings	Amount	Federal Taxes		State/Local Taxes		Deductions		Net Pay		
Gross	18,672.40	SS/Med	1,159.51	OH State	806.89	SAVE 1	400.00	4	Chks	6,869.97
REGLAR	1,200.00	Fed Wt	2,813.98	2307	37.77			4	Deps	6,350.86
SALARY	17,472.40			Wstrvill	233.42			8	Pays	13,220.83
Total Gross	**18,672.40**	**Total Withholdings**			**5,051.57**	**Total Deductions**	**400.00**	**8**	**Total Net**	**13,220.83**

Taxes

Tax Type	Deposit Responsibility	Total Taxes	Employer This Pay	Employee This Pay	Taxable Wages	# of Employees	Tax Rate	ID Number
Social Security/Medicare	ADP	2,319.02	1,159.51	1,159.51	18,672.40	8		311562602
Federal Withholding	ADP	2,813.98		2,813.98	18,672.40	8		311562602
Federal Deposit		**5,133.00**	**1,159.51**	**3,973.49**				
Federal Unemployment	ADP	31.07	31.07		3,884.60	8	.8000 %	311562602
OH State Income Tax	ADP	806.89		806.89	18,672.40	8		*Missing Tax ID #*
OH Unemployment	ADP	128.77	128.77		4,769.20	8	2.7000 %	1191091-00-4
Westerville	ADP	233.42		233.42	18,672.40	8		
Pickerington LSD	ADP	37.77		37.77	3,827.00	2		
ADP Responsibility		**6,370.92**	**1,319.35**	**5,051.57**				
Total Taxes		**6,370.92**	**1,319.35**	**5,051.57**				

Cash Flow Summary

	Amount	Account Number	Bank Number	Bank Name
Checks	6,869.97			
Net Direct Deposits	6,350.86			
Taxes - ADP Resp.	6,370.92			
Direct Deposit-Other	400.00			
ADP Invoice	59.67			
Cash Requirements	**20,051.42**	[redacted]	[redacted]	[redacted]

Messages

The IRS imposes a $50 fine for each W2 or 1099 submitted with missing or incorrect social security or tax identification numbers. Please verify the information in the Tax Rate and ID Number columns on this report, and provide the missing information to your client service representative.

We are responsible for depositing your payroll taxes listed above.

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BY:

ADP EASYPAY

Client: 5WD
LEADER TECHNOLOGIES LLC

Payroll Summary

Period Covered: **11/19/2000 - 12/02/2000**
Check Date: **12/08/2000**

Run: 14
Week: 49
Qtr: 4
Page: 1

Employee Information		Earnings	Rate	Hours	Amount	Federal Taxes		State/Local Taxes		Deductions		Net Pay	Check Cleared? ☑
F[redacted]TIM W *New Hire*	#0011 Married/04	Gross SALARY			1,615.40 1,615.40	SS/Med Fed Wt	123.58 140.48	OH State Wstrvill	54.79 20.19			Net Pay **Check** #90077628	1276.36 ☐
F[redacted]ELIZABETH C *Address Change*	#0008 Single/01	Gross SALARY			2,230.80 2,230.80	SS/Med Fed Wt	170.66 439.93	OH State Wstrvill	93.63 27.89	SAVE 1	400.00	Net Pay	1098.69 Direct Deposit
G[redacted]ANDREA J *New Hire*	#0012 Married/00	Gross SALARY			846.20 846.20	SS/Med Fed Wt	64.73 108.32	OH State 2307 Wstrvill	32.30 8.46 10.58			Net Pay **Check** #90077629	621.81 ☐
M[redacted]CARRIE D *Address Change*	#0004 Single/01	Gross REGLAR	 15.0000	 80.00	1,200.00 1,200.00	SS/Med Fed Wt	91.80 151.31	OH State Wstrvill	38.30 15.00			Net Pay	903.59 Direct Deposit
M[redacted]MICHAEL T	#0003 Married/08	Gross SALARY			4,337.60 4,337.60	SS/Med Fed Wt	62.89 694.09	OH State Wstrvill	216.10 54.22			Net Pay **Check** #90077630	3310.30 ☐
P[redacted]CHRISTOPHER M	#0009 Married/03	Gross SALARY			2,230.80 2,230.80	SS/Med Fed Wt	170.66 279.95	OH State Wstrvill	90.80 27.89			Net Pay **Check** #90077631	1661.50 ☐
R[redacted]WILLIAM C	#0010 Married/04	Gross SALARY			3,230.80 3,230.80	SS/Med Fed Wt	247.16 504.80	OH State Wstrvill	146.36 40.39			Net Pay	2292.09 Direct Deposit
W[redacted]BRADFORD L	#0002 Married/02	Gross SALARY			2,980.80 2,980.80	SS/Med Fed Wt	226.03 495.10	OH State 2307 Wstrvill	134.61 29.31 37.26			Net Pay	2056.49 Direct Deposit
Department Totals		**Gross REGLAR SALARY**		 **80.00**	**18,672.40 1,200.00 17,472.40**	**SS/Med Fed Wt**	**1,159.51 2,813.98**	**OH State 2307 Wstrvill**	**806.89 37.77 233.42**	**SAVE 1**	**400.00**	**8 Pays**	**13220.83**
CLIENT TOTALS		**Gross REGLAR SALARY**		 **80.00**	**18,672.40 1,200.00 17,472.40**	**SS/Med Fed Wt**	**1,159.51 2,813.98**	**OH State 2307 Wstrvill**	**806.89 37.77 233.42**	**SAVE 1**	**400.00**	**4 Chks 4 Deps 8 Pays**	**6,869.97 6,350.86 13,220.83**

Payroll Statistics

Employees Paid: 8
Active Employees Not Paid: 0
Terminated Employees Paid: 0

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Department	Earnings	Hours	Amount	Federal Taxes		State/Local Taxes		Deductions		Net Pay	
Department											
This Pay Totals	Gross REGLAR SALARY	 80.00 	18,672.40 1,200.00 17,472.40	SS/Med Fed Wt	1,159.51 2,813.98	OH State 2307 Wstrvill	806.89 37.77 233.42	SAVE 1	400.00	4 Chks 4 Deps	6,869.97 6,350.86
Month-to-Date Totals	Gross REGLAR SALARY	 80.00 	18,672.40 1,200.00 17,472.40	SS/Med Fed Wt	1,159.51 2,813.98	STATE CTY/LOC CY2/LC2	806.89 233.42 37.77	SAVE 1	400.00	8 Checks	13,220.83
CLIENT THIS PAY TOTALS	Gross REGLAR SALARY	 80.00 	18,672.40 1,200.00 17,472.40	SS/Med Fed Wt	1,159.51 2,813.98	OH State 2307 Wstrvill	806.89 37.77 233.42	SAVE 1	400.00	4 Chks 4 Deps 8 Pays	6,869.97 6,350.86 13,220.83
CLIENT MONTH-TO-DATE TOTALS	Gross REGLAR SALARY	 80.00 	18,672.40 1,200.00 17,472.40	SS/Med Fed Wt	1,159.51 2,813.98	OH State 2307 Wstrvill	806.89 37.77 233.42	SAVE 1	400.00	8 Checks	13,220.83
CLIENT MONTH-TO-DATE EMPLOYER TOTALS				SS/Med FUTA	1,159.51 31.07	OH SUI	128.77				

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Client: 5WD
LEADER TECHNOLOGIES LLC

Month-to-Date Summary

Period Covered: 11/19/2000 - 12/02/2000
Check Date: 12/08/2000

Run: 14
Week: 49
Qtr: 4
Page: 1

New Hires

Employee Information	Taxes	Overrides	Deductions	Per Pay Amount	Direct Deposits
[redacted],TIM W #0011 [redacted] Bi-Weekly Salary:1,615.40 Hire: 11/20/2000 [redacted] Birth: [redacted] *This employee's data was sent to OH for New Hire Reporting.*	SS/Med Fed Wt OH State Wstrvill	 Married/04 3660			
[redacted]ANDREA J #0012 [redacted] Bi-Weekly Salary:1,692.40 Hire: 11/27/2000 [redacted] Birth: [redacted] *This employee's data was sent to OH for New Hire Reporting.*	SS/Med Fed Wt OH State Wstrvill 2307	 Married/00 3660 6834			

Changes

Employee Information	Change Type	Prior Data	New Data
[redacted],ELIZABETH C #0008	Address Line 1 Address Zip Code	[redacted]	[redacted]
[redacted]CARRIE D #0004	Address Line 1 Address City Address Zip Code	[redacted]	[redacted]

OK [illegible]
12-6-00

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Client: 5WD
LEADER TECHNOLOGIES LLC

Employee Change List

Period Covered: 11/19/2000 - 12/02/2000
Check Date: 12/08/2000

Run: 14
Week: 49
Qtr: 4
Page: 1

Please verify the following information. If you have any changes, inform the payroll representative when submitting your payroll.

Dates

Period Ending Date 12/16/2000
Check Date 12/22/2000
This is the Last Pay of the Month.
Please change if appropriate:
N Last Pay of Quarter 4
Y Last Pay of Month December

Optional Check Stub Message

Enter Optional Check Stub Message (maximum 66 characters) below:

____

Deductions

This is payroll #2 of the current month.

Deductions Scheduled by Pay of Month

✓-Deductions Active for Pay of Month
Please change if appropriate.

Code	Description	1	2	3	4	5
99	MISC.					
90	CHKG 1	✓	✓	✓	✓	✓
92	CHKG 2	✓	✓	✓	✓	✓

Deductions Taken From Each Check, Every Pay Period

Reports

Check	Description	Price
____	Master List	No Charge
____	Employee List	No Charge
____	Seniority	$5.25 each
____	Rate Review	$5.25 each

Supplies

Qty	Description	Price
____	Time Card Labels Period Ending __________(mm/dd/yyyy)	$6.00 per set
____	Attendance Records	$11.00 plus 25¢ per employee
____	Name and Address Labels	6¢ per employee $9.00 minimum
____	3-Ring Binders (9"x12")	$8.00 each
____	Check Envelopes (box of 500)	$24.00 per box
____	W-4 Forms (pad of 50)	$5.50 per pad

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BY: ______

Employee Name	Emp#	Net Pay	Check Number ☑
F[redacted]TIM W	0011	1,276.36	90077628 ☐
G[redacted]ANDREA J	0012	621.81	90077629 ☐
M[redacted]MICHAEL T	0003	3,310.30	90077630 ☐
P[redacted],CHRISTOPHER	0009	1,661.50	90077631 ☐
CLIENT TOTAL		**6,869.97**	

4	Checks	6,869.97
0	Voids	
0	Manuals	
4	Total	6,869.97

DEC - 6 2000

EASYPAY

Client: 5WD
LEADER TECHNOLOGIES LLC

Account Reconciliation Report

Period Covered: 11/19/2000 - 12/02/2000
Check Date: 12/08/2000

Run: 14
Week: 49
Qtr: 4
Page: 1

Employee Information	Emp#	Amount	Funds Source	Account Type	Account Number	Receiving Bank Name	Receiving Bank Number
F[redacted],ELIZABETH C	0008	400.00	SAVE 1	Savings	[redacted]	[redacted]	[redacted]
F[redacted],ELIZABETH C	0008	1,098.69	NETPAY	Checking	[redacted]	[redacted]	[redacted]
M[redacted],CARRIE D	0004	903.59	NETPAY	Checking	[redacted]	[redacted]	[redacted]
R[redacted],WILLIAM C	0010	2,292.09	NETPAY	Checking	[redacted]	[redacted]	[redacted]
W[redacted],BRADFORD L	0002	2,056.49	NETPAY	Checking	[redacted]	[redacted]	[redacted]
CLIENT TOTAL		6,750.86					

RECAP BY SOURCE OF FUNDS	Funds Source	Count	Amount
	SAVE 1	1	400.00
	NETPAY	4	6,350.86
Total Deposits		5	6,750.86

DEC - 6 2000

BY:

Employee Name	T-Term Emp#	Dept	Rate	Salary	Marital Status	Number Of Exempt.	Override Pay Freq.	SUI St.	Social Security Number	Birth Date	Hire Date	Raise/Term Date	Other	Distribution Number
F[redacted]TIM W	0011			1615.40	[redacted]	04			[redacted]	[redacted]	11/20/2000			
F[redacted]ELIZABETH C	0008			2230.80	[redacted]	01			[redacted]	[redacted]	09/25/2000			
G[redacted],ANDREA J	0012			1692.40	[redacted]	00			[redacted]	[redacted]	11/27/2000			
G[redacted]MICHAEL J	T 0001				[redacted]	01			[redacted]	[redacted]	06/19/1997	05/31/2000		
M[redacted],CARRIE D	0004		15.0000		[redacted]	01			[redacted]	[redacted]	04/03/2000			
M[redacted],CARRIE D	T 0005		14.0000		[redacted]	01			[redacted]	[redacted]	04/03/2000			
M[redacted],MICHAEL T	0003			4337.60	[redacted]	08			[redacted]	[redacted]	06/09/1997			
M[redacted]MICHAEL T	T 0006			9398.04	[redacted]	08			[redacted]	[redacted]	06/09/1997			
P[redacted],CHRISTOPHER M	0009			2230.80	[redacted]	03			[redacted]	[redacted]	10/23/2000			
R[redacted],WILLIAM C	0010			3230.80	[redacted]	04			[redacted]	[redacted]	10/23/2000			
W[redacted],BRADFORD L	0002			2980.80	[redacted]	02			[redacted]	[redacted]	04/26/1999			
W[redacted],BRADFORD L	T 0007			6458.33	[redacted]	02			[redacted]	[redacted]	04/26/1999			

CLIENT: 5WD 8-Active 4-Terminated 12-Total

DEC - 6 2000

BY:

Employee Information	Earnings	Hours YTD	YTD	Taxes	Overrides	YTD	Deductions	Per Pay Amount	YTD	Direct Deposit
F[redacted] TIM W #0011 Hire: 11/20/2000 Salary: 1,615.40 Birth: [redacted]	Gross SALARY		1,615.40 1,615.40	SS/Med Fed Wt OH State Credit Weeks: Wstrvill	 Married/04 2 3660	123.58 140.48 54.79 20.19				
F[redacted] ELIZABETH C #0008 [redacted] Hire: 09/25/2000 Salary: 2,230.80 Birth: [redacted]	Gross SALARY		11,154.00 11,154.00	SS/Med Fed Wt OH State Credit Weeks: Wstrvill	 Single/01 12 3660	853.28 2,078.88 438.80 139.44	SAVE 1	$ 400.00	2,400.00	SAVE 1 to Saving ACCT# [redacted] BANK [redacted] Net Pay to Checking ACCT [redacted] BANK [redacted]
G[redacted] ANDREA J #0012 [redacted] Hire: 11/27/2000 Salary: 1,692.40 Birth: [redacted]	Gross SALARY		846.20 846.20	SS/Med Fed Wt OH State Credit Weeks: Wstrvill 2307	 Married/00 2 3660 6834	64.73 108.32 32.30 10.58 8.46				
G[redacted] MICHAEL J T#0001 [redacted] Hire: 06/19/1997 Term: 05/31/2000 Birth: [redacted] [redacted]				SS/Med Fed Wt OH State Whitehll	 Single/01 6365		SAVE 1 CHKG 2	$ 150.00 $ 350.00		Net Pay to Checking ACCT# [redacted] BANK [redacted] SAVE 1 to Saving ACCT [redacted] BANK [redacted] CHKG 2 to Checking ACCT [redacted] BANK [redacted]
M[redacted] CARRIE D #0004 [redacted] Hire: 04/03/2000 Rate: 15.0000/Hr Birth [redacted] *Transfer to Employee # 0005*	Gross REGLAR OTHER	 1069.75 24.00	15,879.75 15,543.75 336.00	SS/Med Fed Wt OH State Credit Weeks: Wstrvill	 Single/01 18 3660	1,214.80 1,981.60 498.19 198.50				Net Pay to Checking ACCT# [redacted] BANK # [redacted]
M[redacted] RRIE D T#0005 [redacted] Hire: 04/03/2000 Rate: 14.0000/Hr Birth [redacted] *Transfer from Employee # 0004*	Gross REGLAR O/TIME	 319.00 2.80	4,362.05 4,306.40 55.65	SS/Med Fed Wt OH State Credit Weeks:	 Single/01 4	333.70 483.06 122.73			DEC - 6 2000	

ADP EASYPAY

Client: 5WD
LEADER TECHNOLOGIES LLC

Master List

Period Covered: 11/19/2000 - 12/02/2000
Check Date: 12/08/2000

Run: 14
Week: 49
Qtr: 4
Page: 1

Employee Information	Earnings	Hours YTD	YTD	Taxes	Overrides	YTD	Deductions	Per Pay Amount	YTD	Direct Deposit
M[redacted]MICHAEL T #0003 [redacted] Hire: 06/09/1997 Salary: 4,337.60 Birth: [redacted] [redacted] *Transfer to Employee # 0006*	Gross SALARY		57,111.36 57,111.36	SS/Med Fed Wt OH State Credit Weeks: 18 Wstrvill	 Married/08 3660	2,639.12 9,138.72 2,845.33 713.91				
M[redacted]MICHAEL T T#0006 [redacted] Hire: 06/09/1997 Salary: 9,398.04 Birth: [redacted] [redacted] *Transfer from Employee # 0003*	Gross SALARY		46,990.20 46,990.20	SS/Med Fed Wt OH State Credit Weeks: 10 Whitehll	 Married/08 6365	3,594.75 7,519.15 2,341.10 939.80				
P[redacted],CHRISTOPHER M #0009 [redacted] Hire: 10/23/2000 Salary: 2,230.80 Birth: [redacted] [redacted]	Gross SALARY		7,807.80 7,807.80	SS/Med Fed Wt OH State Credit Weeks: 8 Wstrvill	 Married/03 $ 25 Addl 3660	597.30 979.83 317.80 97.61				
R[redacted],WILLIAM C #0010 [redacted] Hire: 10/23/2000 S[redacted]30.80 Birth: [redacted] [redacted]	Gross OTHER SALARY		13,692.40 4,000.00 9,692.40	SS/Med Fed Wt OH State Credit Weeks: 8 Wstrvill	 Married/04 3660	1,047.47 2,234.57 636.00 171.17				Net Pay to Checking ACCT[redacted] BANK[redacted]
W[redacted],BRADFORD L #0002 [redacted] Hire: 04/26/1999 Salary: 2,980.80 Birth: [redacted] [redacted] *Transfer to Employee # 0007*	Gross SALARY		39,246.92 39,246.92	SS/Med Fed Wt OH State Credit Weeks: 18 Wstrvill 2307	 Married/02 3660 6834	3,002.39 6,518.79 1,772.39 490.59 385.89				Net Pay to Checking ACCT[redacted] BANK[redacted]
W[redacted],BRADFORD L T#0007 [redacted] Hire: 04/26/1999 Salary: 6,458.33 Birt[redacted] [redacted] *Transfer from Employee # 0002*	Gross SALARY		32,291.65 32,291.65	SS/Med Fed Wt OH State Credit Weeks: 10 Whitehll 2307	 Married/02 6365 6834	2,470.31 5,363.55 1,458.30 645.85 317.50				
CLIENT TOTALS 8 Active 4 Terminated 12 Total	Gross REGLAR O/TIME OTHER SALARY	 1388.75 2.80 24.00	230,997.73 19,850.15 55.65 4,336.00 206,755.93	SS/Med Fed Wt OH State Wstrvill Whitehll 2307		15,941.43 36,546.95 10,517.73 1,841.99 1,585.65 711.85	SAVE 1		2,400.00	

DEC - 6 2000

ADP EASYPAY

Client: 5WD
LEADER TECHNOLOGIES LLC

Master List

Period Covered: 11/19/2000 - 12/02/2000
Check Date: 12/08/2000

Run: 14
Week: 49
Qtr: 4
Page: 2

5WD

LEADER TECHNOLOGIES LLC
5330 E MAIN ST SUITE 200
COLUMBUS, OH 43213

TOTAL PRODUCED FOR 5WD
9

***** MUST BE STUFFED *****

RECEIVED
DEC - 6 2000
BY:

TEAR HERE

VERIFY DOCUMENT AUTHENTICITY: COLORED AREA MUST CHANGE IN TONE GRADUALLY AND EVENLY FROM DARK AT TOP TO LIGHTER AT BOTTOM

LEADER TECHNOLOGIES LLC
5330 E MAIN ST SUITE 200
COLUMBUS, OH 43213

PERIOD ENDING 12/02/2000 CHECK DATE 12/08/2000

TOTAL FOR 5WD	4 CHECKS	NET	$6,869.97
TOTAL FOR 5WD	4 NET PAY DEPOSITS	NET	$6,350.86
TOTAL FOR 5WD	1 OTHER DEPOSITS	NET	$400.00

****VOID************VOID************VOID**** ******VOID******

STARTING CHECK # 90077628
ENDING CHECK # 90077631

*** MUST BE STUFFED ***

THIS IS NOT A CHECK

COMPUTER Wizards

4300 Bitterroot Drive
Westerville, Ohio 43081

Invoice 1600

DATE	5/9/2001
TERMS	
Net 30	

BILL TO

Leader Technologies
921 Eastwind Dr, Ste. 118
Westerville, OH 43081

PROJECT

QUANTITY	DESCRIPTION	RATE	AMOUNT
1,171.8744	Consulting	50.00	58,593.72
20.256	Consulting	50.00	1,012.80
	Ohio State Sales Tax	6.00%	~~0.00~~

Equity B for Steve

Invoice for Payroll April 2001 CWC Hours

Total $59,606.52

If you have any questions about your bill, please contact us at: (614) 818-9088 or accounting@computerwizards.com

Invoice 1600

COMPUTER Wizards

4300 Bitterroot Drive
Westerville, Ohio 43081

DATE	5/9/2001
TERMS	
Net 30	

BILL TO

Leader Technologies
921 Eastwind Dr, Ste. 118
Westerville, OH 43081

PROJECT

QUANTITY	DESCRIPTION	RATE	AMOUNT
1,171.8744	Consulting	50.00	58,593.72
	Ohio State Sales Tax	6.00%	0.00
Invoice for Payroll April 2001 CWC Hours		**Total**	$58,593.72

If you have any questions about your bill, please contact us at: (614) 818-9088 or accounting@computerwizards.com

2:18 PM

05/11/01

Accrual Basis

Computer Wizards
Payroll Summary
May 4, 2001

	Andrew M. B[redacted]			Charles D H[redacted]			Eric M R[redacted]			Jeff R La...
	Hours	Rate	May 4, 01	Hours	Rate	May 4, 01	Hours	Rate	May 4, 01	Hours
Employee Wages, Taxes and Adjustments										
Gross Pay										
Salary	210.6		5,967.00			0.00	232.35		6,561.75	440.17
Hourly Regular Rate			0.00	8.32	33.13	275.64			0.00	
Total Gross Pay			5,967.00			275.64			6,561.75	
Deductions from Gross Pay										
Simple IRA			-150.00			-150.00			-550.00	
Total Deductions from Gross Pay			-150.00			-150.00			-550.00	
Adjusted Gross Pay			5,817.00			125.64			6,011.75	
Taxes Withheld										
Federal Withholding			-940.00			0.00			-1,062.00	
Medicare Employee			-86.52			-4.00			-95.14	
Social Security Employee			-369.95			-17.09			-406.83	
CO - Withholding			0.00			0.00			0.00	
NC - Withholding			0.00			0.00			0.00	
NM - Withholding			0.00			0.00			0.00	
OH - Withholding			0.00			-0.58			-266.42	
OK - Withholding			-323.00			0.00			0.00	
OH - School District			0.00			0.00			0.00	
Total Taxes Withheld			-1,719.47			-21.67			-1,830.39	
Net Pay			4,097.53			103.97			4,181.36	
Employer Taxes and Contributions										
Federal Unemployment			0.00			2.20			0.00	
Medicare Company			86.52			4.00			95.14	
Social Security Company			369.95			17.09			406.83	
CO - Department of Labor			0.00			0.00			0.00	
NC - Unemployment Company			0.00			0.00			0.00	
NM - Unemployment Company			0.00			0.00			0.00	
OH - Unemployment Company			0.00			7.44			0.00	
OK - Unemployment Company			0.00			0.00			0.00	
CO - Tax Surcharge			0.00			0.00			0.00	
NC - Training & Reemployment			0.00			0.00			0.00	
Total Employer Taxes and Contributions			456.47			30.73			501.97	

2:18 PM

05/11/01

Accrual Basis

Computer Wizards
Payroll Summary
May 4, 2001

	Jeff R L[redacted]		Mark C A[redacted]			Stanley J B[redacted]			Steven E. H[redacted]	
	Rate	May 4, 01	Hours	Rate	May 4, 01	Hours	Rate	May 4, 01	Hours	Rate
Employee Wages, Taxes and Adjustments										
Gross Pay										
Salary		14,577.20	214.35		6,836.38	225.25		6,901.97	243.13	
Hourly Regular Rate		0.00			0.00			0.00		
Total Gross Pay		14,577.20			6,836.38			6,901.97		
Deductions from Gross Pay										
Simple IRA		-1,125.00			-150.00			-200.00		
Total Deductions from Gross Pay		-1,125.00			-150.00			-200.00		
Adjusted Gross Pay		13,452.20			6,686.38			6,701.97		
Taxes Withheld										
Federal Withholding		-3,136.00			-1,251.00			-1,255.00		
Medicare Employee		-211.37			-99.13			-100.08		
Social Security Employee		-903.78			-423.86			-427.92		
CO - Withholding		0.00			0.00			-304.00		
NC - Withholding		0.00			-461.94			0.00		
NM - Withholding		0.00			0.00			0.00		
OH - Withholding		-821.83			0.00			0.00		
OK - Withholding		0.00			0.00			0.00		
OH - School District		0.00			0.00			0.00		
Total Taxes Withheld		-5,072.98			-2,235.93			-2,087.00		
Net Pay		8,379.22			4,450.45			4,614.97		
Employer Taxes and Contributions										
Federal Unemployment		0.00			0.00			0.00		
Medicare Company		211.37			99.13			100.08		
Social Security Company		903.78			423.86			427.92		
CO - Department of Labor		0.00			0.00			0.00		
NC - Unemployment Company		0.00			0.00			0.00		
NM - Unemployment Company		0.00			0.00			0.00		
OH - Unemployment Company		0.00			0.00			0.00		
OK - Unemployment Company		0.00			0.00			0.00		
CO - Tax Surcharge		0.00			0.00			0.00		
NC - Training & Reemployment		0.00			0.00			0.00		
Total Employer Taxes and Contributions		1,115.15			522.99			528.00		

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05/11/01

Accrual Basis

Computer Wizards
Payroll Summary
May 4, 2001

	Steven E...	Vonda K B[redacted]			Wendy Y A[redacted]			TOTAL		
	May 4, 01	Hours	Rate	May 4, 01	Hours	Rate	May 4, 01	Hours	Rate	May 4, 01
Employee Wages, Taxes and Adjustments										
Gross Pay										
Salary	7,740.00			0.00			0.00	1,565.85		48,584.30
Hourly Regular Rate	0.00	42.15	16.50	695.48	98.73	27.00	2,665.71	149.20		3,636.83
Total Gross Pay	7,740.00			695.48			2,665.71			52,221.13
Deductions from Gross Pay										
Simple IRA	-550.00			-50.00			-125.00			-3,050.00
Total Deductions from Gross Pay	-550.00			-50.00			-125.00			-3,050.00
Adjusted Gross Pay	7,190.00			645.48			2,540.71			49,171.13
Taxes Withheld										
Federal Withholding	-1,121.00			-16.00			-300.00			-9,081.00
Medicare Employee	-112.23			-10.09			-38.65			-757.21
Social Security Employee	-479.88			-43.12			-165.28			-3,237.71
CO - Withholding	0.00			0.00			0.00			-304.00
NC - Withholding	0.00			0.00			0.00			-461.94
NM - Withholding	0.00			-9.51			0.00			-9.51
OH - Withholding	-343.37			0.00			-132.73			-1,564.93
OK - Withholding	0.00			0.00			0.00			-323.00
OH - School District	0.00			0.00			0.00			0.00
Total Taxes Withheld	-2,056.48			-78.72			-636.66			-15,739.30
Net Pay	5,133.52			566.76			1,904.05			33,431.83
Employer Taxes and Contributions										
Federal Unemployment	0.00			5.56			0.00			7.76
Medicare Company	112.23			10.09			38.65			757.21
Social Security Company	479.88			43.12			165.28			3,237.71
CO - Department of Labor	0.00			0.00			0.00			0.00
NC - Unemployment Company	0.00			0.00			0.00			0.00
NM - Unemployment Company	0.00			17.43			0.00			17.43
OH - Unemployment Company	0.00			0.00			0.00			7.44
OK - Unemployment Company	0.00			0.00			0.00			0.00
CO - Tax Surcharge	0.00			0.00			0.00			0.00
NC - Training & Reemployment	0.00			0.00			0.00			0.00
Total Employer Taxes and Contributions	592.11			76.20			203.93			4,027.65

April 2001 Hour Summary

Employee	Status	Apr Hrs Worked	Apr Hrs Paid to Emplyee	Apr Hr. Rate	Total Pay	Apr Vac. Bank Hrs pos=Earned neg=Used	Apr Bank Dollars pos=Earned neg=Used	Total Labor (adjusted for vacation bank)	Non-Leader Hours	Non-Leader Labor Dollars	Labor Amount Billed to Leader	Previous Bank Balance	New Bank Balance	** Hours to Teresa (Jeff only)	Holiday Hrs Total Holiday Hrs 2001	
Jeff	FT	440.17	440	$ 33.13	$ 14,577.20	0.17	$ 5.63	$ 14,582.83	0.33	$ 10.93	$ 14,571.90	1084.80	1084.97		0	
Teresa	PT	**		$ 33.13	$ -									0	0	
Steve	FT	215	215	$ 36.00	$ 7,740.00	0	$ -	$ 7,740.00	0.00	$ -	$ 7,740.00	213.44	213.44		0	
Mark	FT	214.35	206.35	$ 33.13	$ 6,836.38	8	$ 265.04	$ 7,101.42	0.00	$ -	$ 7,101.42	87.86	95.86		0	
Andrew	FT	210.6	221	$ 27.00	$ 5,967.00	-10.4	$ (280.80)	$ 5,686.20	0.00	$ -	$ 5,686.20	-1.09	-11.49		0	
Bud	FT	225.25	208.33	$ 33.13	$ 6,901.97	16.92	$ 560.56	$ 7,462.53	5.25	$ 173.93	$ 7,288.60	-59.87	-42.95		0	
Eric	FT	232.35	195	$ 33.65	$ 6,561.75	37.35	$ 1,256.83	$ 7,818.58	0.00	$ -	$ 7,818.58	89.82	127.17		0	
Wendy	PT	98.73	98.73	$ 33.13	$ 3,270.92			$ 3,270.92	0.00	$ -	$ 3,270.92				0	
Dave	PT	8.32	8.32	$ 33.13	$ 275.64			$ 275.64	1.19	$ 39.42	$ 236.22				0	
Vonda	PT	42.15	42.15	$ 16.50	$ 695.48			$ 695.48	0.00	$ -	$ 695.48				0	
TOTALS		1686.92	1634.88		$ 52,826.34	52.04	1807.2592	$ 54,633.60	6.77	$ 224.29	[redacted]	1414.96	1467		0	
		Hours straight from Taskman	A set number of hrs; should not vary;	This will change based on a raise schedule	Automatically computed = (hrs paid x hourly rate)	Automatically computed = (hrs worked - paid); exception is Jeff, also subtract hrs to Teresa	(Added to Invoce) Automatically computed = (hrs banked x hourly rate)	Automatically computed = Sum of regular fixed pay +/- the vacation bank dollars earned/used	Hours straight from Taskman	Automatically computed (hours X rate)	Automatically computed = Total Labor - Non Leader Labor Dollars	This comes directly from the previous month	Total Running Summary: addition of the current month to previous balance	Should be a consisitent number of hours each month for 6 months, that will support $1000 going into Teresa's IRA		TO BE DETERMINED

[illegible]		[illegible]
Social Security	from Quick Books	$ 3,365.68
Medicare		$ 786.10
State Unemployment		$ 24.87
Federal Unemployment		$ 7.76
Total Labor dollars subject to overhead		[illegible]
[illegible] ADDED TO INVOICE [illegible]		

Com. Paid for salaries		Com. Paid for Vac. Bank $$	Totals	Employee	Apr Hrs Worked	Hrs Paid or vacation	Apr Hr. Rate	Hours to Purchase Leader Equity	$$ to Purchase Leader Equity
3237.71	plus	127.97	3365.68						
757.21	plus	28.89	786.1	Jeff	440.17	440.17	$ 33.13	0.00	$ -
24.87			24.87	Teresa	**		$ 33.13		
7.76			7.76	Steve	243.13	215	$ 36.00	28.13	$ 1,012.68
				Mark	214.35	214.35	$ 33.13	0.00	$ -
				Andrew	210.6	221	$ 27.00	(10.40)	$ -
1567	ira			Bud	225.25	225.25	$ 32.05	0.00	$ -
1600	cc			Eric	232.35	232.35	$ 33.65	0.00	$ -
				Wendy	98.73	98.73	$ 33.13	0.00	$ -
				Dave	8.32	8.32	$ 33.13	0.00	$ -
				Vonda	42.15	42.15	$ 16.50	0.00	$ -
				TOTALS	1715.05	1697.32		28.13	$ 1,012.68

Payroll Totals

Earnings	Amount	Federal Taxes		State/Local Taxes		Deductions		Net Pay		
Gross	26,421.40	SS/Med	1,729.37	OH State	1,090.00	SAVE 1	250.00	2	Chks	5,036.17
REGLAR	2,487.50	Fed Wt	3,643.47	2307	45.98			10	Deps	14,296.12
SALARY	23,933.90			Wstrvill	330.29			12	Pays	19,332.29
Total Gross	**26,421.40**	**Total Withholdings**			**6,839.11**	**Total Deductions**	**250.00**	**12**	**Total Net**	**19,332.29**

Taxes

Tax Type	Deposit Responsibility	Total Taxes	Employer This Pay	Employee This Pay	Taxable Wages	# of Employees	Tax Rate	ID Number
Social Security/Medicare	ADP	3,458.74	1,729.37	1,729.37	26,421.40	12		311562602
Federal Withholding	ADP	3,643.47		3,643.47	26,421.40	12		311562602
Federal Deposit		**7,102.21**	**1,729.37**	**5,372.84**				
Federal Unemployment	ADP					12	.8000 %	311562602
OH State Income Tax	ADP	1,090.00		1,090.00	26,421.40	12		*Missing Tax ID #*
OH Unemployment	ADP					12	2.7000 %	1191091-00-4
Westerville	ADP	330.29		330.29	26,421.40	12		
Pickerington LSD	ADP	45.98		45.98	4,673.20	2		
ADP Responsibility		**8,568.48**	**1,729.37**	**6,839.11**				
Total Taxes		**8,568.48**	**1,729.37**	**6,839.11**				

Cash Flow Summary

	Amount	Account Number	Bank Number	Bank Name
Checks	5,036.17			
Net Direct Deposits	14,296.12			
Taxes - ADP Resp.	8,568.48			
Direct Deposit-Other	250.00			
ADP Invoice	74.62			
Cash Requirements	**28,225.39**	[redacted]	[redacted]	[redacted]

Messages

The IRS imposes a $50 fine for each W2 or 1099 submitted with missing or incorrect social security or tax identification numbers. Please verify the information in the Tax Rate and ID Number columns on this report, and provide the missing information to your client service representative.

We are responsible for depositing your payroll taxes listed above.

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ADP EASYPAY

Client: 5WD
LEADER TECHNOLOGIES LLC

Payroll Summary

Period Covered: **11/18/2001 - 12/01/2001**
Check Date: **12/07/2001**

Run: 25
Week: 49
Qtr: 4
Page: 1

Department	Earnings	Hours	Amount	Federal Taxes		State/Local Taxes		Deductions		Net Pay	
01 - GENERAL & ADMINISTRATIVE											
This Pay Totals	Gross		8,671.10	SS/Med	394.41	OH State	366.18			1 Chk	3,341.67
	REGLAR	131.50	2,487.50	Fed Wt	1,245.51	Wstrvill	108.39			3 Deps	3,214.94
	SALARY		6,183.60								
Month-to-Date Totals	Gross		8,671.10	SS/Med	394.41	STATE	366.18			4 Checks	6,556.61
	REGLAR	131.50	2,487.50	Fed Wt	1,245.51	CTY/LOC	108.39				
	SALARY		6,183.60								
02 - RESEARCH & DEVELOPEMENT											
This Pay Totals	Gross		17,750.30	SS/Med	1,334.96	OH State	723.82	SAVE 1	250.00	1 Chk	1,694.50
	SALARY		17,750.30	Fed Wt	2,397.96	2307	45.98			7 Deps	11,081.18
						Wstrvill	221.90				
Month-to-Date Totals	Gross		17,750.30	SS/Med	1,334.96	STATE	723.82	SAVE 1	250.00	8 Checks	12,775.68
	SALARY		17,750.30	Fed Wt	2,397.96	CTY/LOC	221.90				
						CY2/LC2	45.98				
CLIENT THIS PAY TOTALS	Gross		26,421.40	SS/Med	1,729.37	OH State	1,090.00	SAVE 1	250.00	2 Chks	5,036.17
	REGLAR	131.50	2,487.50	Fed Wt	3,643.47	2307	45.98			10 Deps	14,296.12
	SALARY		23,933.90			Wstrvill	330.29			12 Pays	19,332.29
CLIENT MONTH-TO-DATE TOTALS	Gross		26,421.40	SS/Med	1,729.37	OH State	1,090.00	SAVE 1	250.00	12 Checks	19,332.29
	REGLAR	131.50	2,487.50	Fed Wt	3,643.47	2307	45.98				
	SALARY		23,933.90			Wstrvill	330.29				
CLIENT MONTH-TO-DATE EMPLOYER TOTALS				SS/Med	1,729.37						

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5WD

LEADER TECHNOLOGIES LLC
921 EASTWIND DR
SUITE 118
WESTERVILE, OH 43081

TOTAL PRODUCED FOR 5WD
14

*** MUST BE STUFFED ***

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VERIFY DOCUMENT AUTHENTICITY - COLORED AREA MUST CHANGE IN TONE GRADUALLY AND EVENLY FROM DARK AT TOP TO LIGHTER AT BOTTOM

VOID VOID

LEADER TECHNOLOGIES LLC
921 EASTWIND DR
SUITE 118
WESTERVILE, OH 43081

PERIOD ENDING 12/01/2001 CHECK DATE 12/07/2001

TOTAL FOR 5WD	2	CHECKS	NET	$5,036.17
TOTAL FOR 5WD	10	NET PAY DEPOSITS	NET	$14,296.12
TOTAL FOR 5WD	2	OTHER DEPOSITS	NET	$250.00

****VOID************VOID************VOID**** ******VOID******

THIS IS NOT A CHECK

STARTING CHECK # 90151518
ENDING CHECK # 90151519

*** MUST BE STUFFED ***

ADP EASYPAY COLUMBUS
3660 CORPORATE DRIVE
COLUMBUS, OH 43231

ADP EASYPAY

Advice of Debit # P423391

December 4, 2001 Page 1

LEADER TECHNOLOGIES LLC
921 EASTWIND DRIVE
SUITE 118
WESTERVILLE, OH 43081

Accounts receivable number:
00035-N06266

Any questions? Call your ADP service representative.

Current Charges EASYPAY Branch EM Company Code 5WD

Processing charges for period ending 12/04/2001

NUMBER OF PAYS	12			38.58
TOTAL PAY	14	@	.30	8.20
EMPLOYEE LIST	1			N/C
MASTER LIST	1			N/C
DEPARTMENT SUMMARY	1			N/C
DELIVERY AND HANDLING	1	@	6.00	6.00
TOTAL TAX COMPLETE SERVICES				17.78
OH SALES TAX				4.06
Total debited				$74.62

NO PAYMENT REQUIRED. The amount of $74.62 will be withdrawn from Account# [redacted] Bank# [redacted] Due upon presentation

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VOID VOID

THIS IS NOT A CHECK

NON-NEGOTIABLE

Employee Information		Earnings	Rate	Hours	Amount	Federal Taxes		State/Local Taxes		Deductions		Net Pay	Check Cleared? ☑
01 - GENERAL & ADMINISTRATIVE													
H[redacted],KAREN L	#0016 Single/02	Gross SALARY			1,846.00 1,846.00	SS/Med Fed Wt	141.22 290.44	OH State Wstrvill	70.46 23.08			Net Pay	1320.80 Direct Deposit
M[redacted],CARRIE D	#0004 Single/01	Gross REGLAR	 15.0000	 80.00	1,200.00 1,200.00	SS/Med Fed Wt	91.80 147.98	OH State Wstrvill	38.30 15.00			Net Pay	906.92 Direct Deposit
M[redacted],MICHAEL T	#0003 Married/08	Gross SALARY			4,337.60 4,337.60	SS/Med Fed Wt	62.90 662.71	OH State Wstrvill	216.10 54.22			Net Pay **Check**	3341.67 #90151518 ☐
S[redacted],GLORIA A	#0015 Single/02	Gross REGLAR	 25.0000	 51.50	1,287.50 1,287.50	SS/Med Fed Wt	98.49 144.38	OH State Wstrvill	41.32 16.09			Net Pay	987.22 Direct Deposit
01 - GENERAL & ADMINISTRATIVE Totals		**Gross REGLAR SALARY**		 **131.50**	**8,671.10 2,487.50 6,183.60**	**SS/Med Fed Wt**	**394.41 1,245.51**	**OH State Wstrvill**	**366.18 108.39**			**4 Pays**	**6556.61**
02 - RESEARCH & DEVELOPEMENT													
F[redacted],TIM W	#0011 Married/04	Gross SALARY			1,807.70 1,807.70	SS/Med Fed Wt	138.29 167.02	OH State Wstrvill	65.47 22.60			Net Pay	1414.32 Direct Deposit
F[redacted]ELIZABETH C	#0008 Single/01	Gross SALARY			2,423.10 2,423.10	SS/Med Fed Wt	185.37 476.37	OH State Wstrvill	104.50 30.29	SAVE 1	50.00	Net Pay	1576.57 Direct Deposit
G[redacted]ANDREA J	#0012 Married/01	Gross SALARY			1,692.40 1,692.40	SS/Med Fed Wt	129.47 199.92	OH State 2307 Wstrvill	63.19 16.67 21.16			Net Pay	1261.99 Direct Deposit
M[redacted],DAVID E	#0013 Married/01	Gross SALARY			1,730.80 1,730.80	SS/Med Fed Wt	132.41 205.68	OH State Wstrvill	65.37 21.64			Net Pay	1305.70 Direct Deposit
P[redacted],CHRISTOPHER M	#0009 Married/03	Gross SALARY			2,269.30 2,269.30	SS/Med Fed Wt	173.60 279.85	OH State Wstrvill	92.98 28.37			Net Pay **Check**	1694.50 #90151519 ☐
R[redacted],WILLIAM C	#0010 Married/10	Gross SALARY			3,230.80 3,230.80	SS/Med Fed Wt	224.22 303.64	OH State Wstrvill	137.44 40.39			Net Pay	2525.11 Direct Deposit
S[redacted],KIM A	#0014 Single/00	Gross SALARY			1,615.40 1,615.40	SS/Med Fed Wt	123.57 288.41	OH State Wstrvill	60.26 20.19	SAVE 1	200.00	Net Pay	922.97 Direct Deposit
W[redacted],BRADFORD L	#0002 Married/02	Gross SALARY			2,980.80 2,980.80	SS/Med Fed Wt	228.03 477.07	OH State 2307 Wstrvill	134.61 29.31 37.26			Net Pay	2074.52 Direct Deposit
02 - RESEARCH & DEVELOPEMENT Totals		**Gross SALARY**			**17,750.30 17,750.30**	**SS/Med Fed Wt**	**1,334.96 2,397.96**	**OH State 2307 Wstrvill**	**723.82 45.98 221.90**	**SAVE 1**	**250.00**	**8 Pays**	**12775.68**

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Client: 5WD
LEADER TECHNOLOGIES LLC

Payroll Register

Period Covered: 11/18/2001 - 12/01/2001
Check Date: 12/07/2001

Run: 25
Week: 49
Qtr: 4
Page: 1

Employee Information	Earnings	Rate	Hours	Amount	Federal Taxes		State/Local Taxes		Deductions		Net Pay	Check Cleared? ☑
CLIENT TOTALS	Gross			26,421.40	SS/Med	1,729.37	OH State	1,090.00	SAVE 1	250.00	2 Chks	5,036.17
	REGLAR		131.50	2,487.50	Fed Wt	3,643.47	2307	45.98			10 Deps	14,296.12
	SALARY			23,933.90			Wstrvill	330.29			12 Pays	19,332.29

Payroll Statistics

Employees Paid:	12
Active Employees Not Paid:	0
Terminated Employees Paid:	0

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Employee Name	Emp#	Net Pay	Check Number ☑
M[redacted]MICHAEL T	0003	3,341.67	90151518 ☐
P[redacted]CHRISTOPHER	0009	1,694.50	90151519 ☐
CLIENT TOTAL		**5,036.17**	

2	Checks	5,036.17
0	Voids	
0	Manuals	
2	Total	5,036.17

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Employee Information	Emp#	Amount	Funds Source	Account Type	Account Number	Receiving Bank Name	Receiving Bank Number
H[redacted],KAREN L	0016	1,320.80	NETPAY	Checking	[redacted]	[redacted]	[redacted]
M[redacted],CARRIE D	0004	906.92	NETPAY	Checking	[redacted]	[redacted]	[redacted]
S[redacted]GLORIA A	0015	987.22	NETPAY	Checking	[redacted]	[redacted]	[redacted]
F[redacted],TIM W	0011	1,414.32	NETPAY	Checking	[redacted]	[redacted]	[redacted]
F[redacted],ELIZABETH C	0008	50.00	SAVE 1	Savings	[redacted]	[redacted]	[redacted]
F[redacted],ELIZABETH C	0008	1,576.57	NETPAY	Checking	[redacted]	[redacted]	[redacted]
G[redacted]ANDREA J	0012	1,261.99	NETPAY	Checking	[redacted]	[redacted]	[redacted]
M[redacted],DAVID E	0013	1,305.70	NETPAY	Checking	[redacted]	[redacted]	[redacted]
R[redacted],WILLIAM C	0010	2,525.11	NETPAY	Checking	[redacted]	[redacted]	[redacted]
S[redacted],KIM A	0014	922.97	NETPAY	Checking	[redacted]	[redacted]	[redacted]
S[redacted],KIM A	0014	200.00	SAVE 1	Savings	[redacted]	[redacted]	[redacted]
W[redacted],BRADFORD L	0002	2,074.52	NETPAY	Checking	[redacted]	[redacted]	[redacted]
CLIENT TOTAL		**14,546.12**					

RECAP BY SOURCE OF FUNDS	Funds Source	Count	Amount
	NETPAY	10	14,296.12
	SAVE 1	2	250.00
Total Deposits		12	14,546.12

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Employee Name	T-Term Emp#	Dept	Rate	Salary	Marital Status	Number Of Exempt.	Override Pay Freq.	SUI St.	Social Security Number	Birth Date	Hire Date	Raise/Term Date	Other	Distribution Number
F[redacted],TIM W	0011	02		1807.70	M	04			[redacted]	[redacted]	11/20/2000			
F[redacted],ELIZABETH C	0008	02		2423.10	S	01			[redacted]	[redacted]	09/25/2000			
G[redacted],ANDREA J	0012	02		1692.40	M	01			[redacted]	[redacted]	11/27/2000			
H[redacted],KAREN L	0016	01		1846.00	S	02			[redacted]	[redacted]	01/01/2001			
M[redacted],CARRIE D	0004	01	15.0000		S	01			[redacted]	[redacted]	04/03/2000			
M[redacted],MICHAEL T	0003	01		4337.60	M	08			[redacted]	[redacted]	06/09/1997			
M[redacted],DAVID E	0013	02		1730.80	M	01			[redacted]	[redacted]	12/12/2000			
P[redacted],CHRISTOPHER M	0009	02		2269.30	M	03			[redacted]	[redacted]	10/23/2000			
R[redacted],WILLIAM C	0010	02		3230.80	M	10			[redacted]	[redacted]	10/23/2000			
S[redacted],KIM A	0014	02		1615.40	S	00			[redacted]	[redacted]	01/01/2001			
S[redacted],GLORIA A	0015	01	25.0000		S	02			[redacted]	[redacted]	01/04/2001			
W[redacted],BRADFORD L	0002	02		2980.80	M	02			[redacted]	[redacted]	04/26/1999			

CLIENT: 5WD 12-Active 0-Terminated 12-Total

RECEIVED
DEC 05 2001
BY:

Employee Information	Earnings	Hours YTD	YTD	Taxes	Overrides	YTD	Deductions	Per Pay Amount	YTD	Direct Deposit
01 - GENERAL & ADMINISTRATIVE										
H[redacted],KAREN L #0016 [redacted] Hire: 01/01/2001 Salary: 1,846.00 Birth:[redacted]	Gross SALARY		44,304.00 44,304.00	SS/Med Fed Wt OH State Credit Weeks: Wstrvill	 Single/02 48 3660	3,389.26 7,038.03 1,691.04 553.92				Net Pay to Checking ACCT[redacted] BANK[redacted]
M[redacted]CARRIE D #0004 [redacted] Hire: 04/03/2000 Rate: 15.0000/Hr Birth:[redacted]	Gross REGLAR	 2000.00	30,000.00 30,000.00	SS/Med Fed Wt OH State Credit Weeks: Wstrvill	 Single/01 50 3660	2,295.00 3,699.50 957.50 375.00				Net Pay to Checking ACCT[redacted] BANK[redacted]
M[redacted]MICHAEL T #0003 [redacted] Hire: 06/09/1997 Salary: 4,337.60 Birth:[redacted]	Gross SALARY		108,440.00 108,440.00	SS/Med Fed Wt OH State Credit Weeks: Wstrvill	 Married/08 50 3660	6,557.18 16,781.39 5,402.50 1,355.50				
S[redacted]GLORIA A #0015 [redacted] Hire: 01/04/2001 Rate: 25.0000/Hr Birth:[redacted]	Gross REGLAR	 1085.15	27,128.75 27,128.75	SS/Med Fed Wt OH State Credit Weeks: Wstrvill	 Single/02 48 3660	2,075.35 2,928.72 810.24 339.11				Net Pay to Checking ACCT[redacted] BANK[redacted]
01 - GENERAL & ADMINISTRATIVE Totals	**Gross REGLAR SALARY**	** 3085.15**	**209,872.75 57,128.75 152,744.00**	**SS/Med Fed Wt OH State Wstrvill**		**14,316.79 30,447.64 8,861.28 2,623.53**				
02 - RESEARCH & DEVELOPEMENT										
F[redacted]TIM W #0011 [redacted] Hire: 11/20/2000 Salary: 1,807.70 Birth[redacted]	Gross OTHER SALARY		43,173.35 96.15 43,077.20	SS/Med Fed Wt OH State Credit Weeks: Wstrvill	 Married/04 50 3660	3,302.76 3,872.68 1,524.71 539.69				Net Pay to Checking ACCT[redacted] BANK[redacted]
F[redacted]ELIZABETH C #0008 [redacted] Hire: 09/25/2000 Salary: 2,423.10 Birth:[redacted]	Gross SALARY		56,712.27 56,712.27	SS/Med Fed Wt OH State Credit Weeks: Wstrvill	 Single/01 50 3660	4,338.49 11,007.76 2,394.01 709.01	SAVE 1	$ 50.00	4,400.00	SAVE 1 to Saving ACCT[redacted] BANK[redacted] Net Pay to Checking [redacted] BANK[redacted]

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Employee Information	Earnings	Hours YTD	YTD	Taxes	Overrides	YTD	Deductions	Per Pay Amount	YTD	Direct Deposit
G[redacted]ANDREA J #0012 [redacted] Hire: 11/27/2000 Salary: 1,692.40 Birth[redacted]	Gross SALARY		34,282.95 34,282.95	SS/Med Fed Wt OH State Credit Weeks: 44 Wstrvill 2307	 Married/01 3660 6834	2,622.65 4,117.39 1,267.01 428.63 339.25				Net Pay to Checking ACCT#[redacted] BANK[redacted]
M[redacted]AVID E #0013 [redacted] Hire: 12/12/2000 Salary: 1,730.80 Birth:[redacted]	Gross SALARY		43,270.00 43,270.00	SS/Med Fed Wt OH State Credit Weeks: 50 Wstrvill	 Married/01 3660	3,310.16 5,142.00 1,634.25 541.00				Net Pay to Checking ACCT[redacted] BANK #[redacted]
[redacted]CHRISTOPHER M #0009 [redacted] Hire: 10/23/2000 Salary: 2,269.30 Birth:[redacted]	Gross SALARY		55,900.90 55,900.90	SS/Med Fed Wt OH State Credit Weeks: 50 Wstrvill	 Married/03 $ 25 Addl 3660	4,276.42 6,830.70 2,277.41 698.88				
R[redacted]WILLIAM C #0010 [redacted] Hire: 10/23/2000 Salary: 3,230.80 Birth:[redacted]	Gross SALARY		80,770.00 80,770.00	SS/Med Fed Wt OH State Credit Weeks: 50 Wstrvill	 Married/10 3660	6,155.97 8,930.17 3,498.44 1,009.75		RECEIVED DEC 0 5 2001 BY:		Net Pay to Checking ACCT[redacted] BANK[redacted]
S[redacted]KIM A #0014 [redacted] Hire: 01/01/2001 Salary: 1,615.40 Birth:[redacted]	Gross SALARY		38,769.60 38,769.60	SS/Med Fed Wt OH State Credit Weeks: 48 Wstrvill	 Single/00 3660	2,965.87 6,988.27 1,446.24 484.56	SAVE 1	$ 200.00	4,600.00	Net Pay to Checking ACCT[redacted] BANK #[redacted] SAVE 1 to Saving ACCT[redacted] BANK #[redacted]
W[redacted]BRADFORD L #0002 [redacted] Hire: 04/26/1999 Salary: 2,980.80 Birth:[redacted]	Gross SALARY		74,520.00 74,520.00	SS/Med Fed Wt OH State Credit Weeks: 50 Wstrvill 2307	 Married/02 3660 6834	5,700.78 12,044.07 3,365.25 931.50 732.75				Net Pay to Checking ACCT#[redacted] BANK[redacted]
02 - RESEARCH & DEVELOPEMENT **Totals**	**Gross** **OTHER** **SALARY**		**427,399.07** **96.15** **427,302.92**	**SS/Med** **Fed Wt** **OH State** **Wstrvill** **2307**		**32,673.10** **58,933.04** **17,407.32** **5,343.02** **1,072.00**	**SAVE 1**		**9,000.00**	
CLIENT TOTALS **12 Active** **0 Terminated** **12 Total**	**Gross** **REGLAR** **OTHER** **SALARY**	 **3085.15**	**637,271.82** **57,128.75** **96.15** **580,046.92**	**SS/Med** **Fed Wt** **OH State** **Wstrvill** **2307**		**46,989.89** **89,380.68** **26,268.60** **7,966.55** **1,072.00**	**SAVE 1**		**9,000.00**	